# Amphenol Modular Jacks product catalogue



# Amphenol

#### **The Company**

Amphenol Commercial Products Group of Amphenol Canada Corp., a subsidiary of Amphenol Corporation, is an ISO 9001 certified facility located in Toronto, Canada. Our activities are dedicated to the design, development, and manufacturing of interconnect products intended for use in the data communications and telecommunications markets. Our expertise in understanding and supporting our customers' interconnect needs has earned Amphenol Canada a reputation of quality and excellence among the world's leading users of electronic components.

#### **About the Catalogue**

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This modular jack catalogue represents some of our more popular products within this product category. Other product categories include, but are not limited to: D-Sub, Micro-Ribbon, USB, Headers and Sockets, CoolPower connectors, VHDCI, Capacitively Decoupled BNC, filtered connectors (D-Subs and micro-ribbon), and rugged connectors (RJ, USB, D-Subs, and bulkhead adapters).

All of our modular jacks are RoHS compliant.

All drawings in this document are measured in inches [mm], unless otherwise indicated.



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#### LED OPTIONS

Note: Denotes LEDs are available for connectors in the series

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# LED OPTIONS

# **LED Designation**

LED	LED 2		LED 1	
Code	Left		Right	
0	Bloc	cked	Blocked	
1	Yel	low	Green	
2	Bloc	cked	Gre	een
3	Yel	low	Bloc	cked
4	Gre	een	Yel	low
5	Gre	een	Gre	een
6	Yel	low	Yel	low
7	R	ed	Gre	een
8	Gre	een	R	ed
9	Gre	een	Blocked	
A	Green	Yellow	Green	Yellow
В	Red	Green	Red	Green
С	Red	Green	Green	Yellow
D	Gre	een	Green	Yellow
E	Yel	low	Green Yellow	
F	Green	Yellow	Yel	low
G	Green	Orange	Green	Orange
Н	Green	Yellow	Gre	een
J	Red	Green	Yel	low
K	Yel	low	Green	Orange
L	Green	Yellow	Red	
Μ	R	ed	Yellow	
N	Green	Red	Green	Yellow
Р	Gre	een	Red	Green
R	Green	Orange	Green	
Т	Red Red		ed	
V	Red	Green	Green	

#### Ex. RJHSE - 538X\*

#### \*LED Designation Code

Note: A black X in the part number refers to the LED designation code for all drawings in this catalogue.

#### **Tab Up Connectors:**



#### Tab Down Connectors:



#### **Stacked Connectors:**



Other LED options are available. If you do not see what you're looking for,

please email sales@amphenolcanada.com to request the complete the LED ordering options.

# WAVE SOLDER PROFILE

# Typical Wave Solder Profile for Leaded and Lead-Free Through-Hole Package





# TAB UP, MULTIPORT, WITH LEDs

A series of EMI Quiet Modular Jack connectors with built-in LEDs. This product is ideal for LAN applications such as adapter cards and routers. Shielded and non-shielded versions are available, with a variety of LED colors and ports.

# **SPECIFICATIONS**

Material	
Insulator:	High temp. thermoplastic; Complies with UL 94V-0; Black
Contacts:	Phosphor bronze hard temper with gold thickness options ( $6\mu$ ", $15\mu$ ", $30\mu$ ", $50\mu$ ") over $50\mu$ " min. nickel on contact mating area; $100\mu$ " min. matte tin plating on soldering tail
Shield:	Stainless steel with tin dipped tails
LED:	Tin plating on LED tails

Mechanical		
Insertion Force:	5 lbs max.	
Pull Retention Force:	20 lbs min.	
Durability:	750 mating & unmating cycles	
Recommended Soldering Temperature:	Wave soldering peaked at 260°C for 5 secs max.	
<b>Operating Temperature:</b>	-55°C to + 85°C	
UL File #:	E135615	
CSA File #:	LR685398	
Note: Connectors without LEDs are suitable for IR Reflow		

#### Electrical

Electrical	
<b>Contact Resistance:</b>	20 mΩ max.
Insulation resistance:	500 $M\Omega$ min. at 500V DC for 2 mins max.
<b>Current Rating:</b>	1.5 Amps per contact
Voltage Rating:	125 Volts AC
DWV:	1000 VAC, 60 Hz. 1 min.
Standard LEDs:	For 5.0 V Systems
Forward Voltage:	2.1 Volts typical
<b>Reverse Voltage:</b>	6 Volts min.
Luminous Intensity:	0.5 mcd min. at 2mA
Low Current LEDs:	For 3.3 V Systems
Forward Voltage:	2 Volts typical
<b>Reverse Voltage:</b>	6 Volts min.
Luminous Intensity:	1 mcd min. at 2mA

Note: Vertical version is only available in single port

### **ORDERING INFORMATION**

#### Version

- 3 Vertical mount, 8 positions,  $30\mu''$  gold plating
- 5 Right angle, 8 positions, 50µ" gold plating
- 7 Right angle, 6 positions,  $50\mu''$  gold plating
- L Right angle, low profile, 8 positions,  $50\mu''$  gold plating
- N Vertical mount, 8 positions, 50µ" gold plating

#### **Shield Options**

- 0 No shield
- 3 Shield with top and side tabs (single port has top tabs only)
- 4 For single port only: Shield with top and side tabs
- F Shield without top, side or bottom tabs
- P Shield with top & bottom tabs, for vertical mount connector

Num	ber of Ports	
Blank	- 1 Port	
02 - 2	Ports	
03 - 3	Ports	
04 - 4	Ports	
06 - 6	Ports	
08 - 8	Ports	
LED	Options	
Click	to view page 3 for options	
Num	ber of Contacts	
4 - 4 (	Contacts	

6 - 6 Contacts 8 - 8 Contacts

#### Didn't find what you were looking for?

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#### RJHSE-508X



**Vertical Mount** 



**FRONT VIEW** 

**SIDE VIEW** 

#### RECOMMENDED PCB LAYOUT

#### Shielded - With Top & Side Ground Tabs



#### RJHSE-338X

RJHSE-548X





#### Single Port Shielded - Low Profile

RJHSE-L38X



Multi Port Non-Shielded

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RJHSE-508X-04



**FRONT VIEW** 

**SIDE VIEW** 



**RECOMMENDED PCB LAYOUT** 

RJHSE TAB UP, MULTIPORT, WITH LEDS

THROUGH - HOLE



**Notes** 



# TAB UP, RJ45 & RJ11, STANDARD PROFILE

This family of EMI quiet modular jack connectors with integrated LEDs features the same data transfer capabilities as our existing series of LED-integrated modular jacks. This product is an economical solution ideal for LAN applications and is intended for use with low temperature soldering processes. Shielded and non-shielded versions are available with a variety of LED options. Also offered in both single and multi port configurations.



# **SPECIFICATIONS**

Material			Electrical	
Insulator:			<b>Contact Resistance:</b>	20 mΩ max.
	Complies with UL 94V-0; Black		Insulation resistance:	500 $M\Omega$ min. at 500V DC for 2 mins max.
•		ronze hard temper with gold thickness ", 15µ", 30µ", 50µ") over 50µ" min. nickel on	Current Rating:	1.5 Amps per contact
		ting area; $100\mu''$ min. matte tin plating on	Voltage Rating:	125 Volts AC
soldering tail		11	DWV:	1000 VAC, 60 Hz. 1 min.
Shield:	Id: Stainless steel with tin dipped tails		LED Forward DC	20mA typical
LED: Tin plating on LED tails		Current:		
Mechanical		LED Forward Voltage:	1.9 Volts max. at 2mA (for single colours) 2.6 Volts max. at 2mA (for bicolours)	
Insertion Force:		5 lbs max.	LED Reverse Voltage:	5 Volts min.
Pull Retention	n Force:	20 lbs min.	LED Light Intensity:	0.4 to 1.5 mcd min. at 2mA (for single
Durability:		750 mating & unmating cycles		colours) 0.5 mcd min. at 2mA (for bicolours)
Recommended Soldering Temperature:		Wave soldering peaked at 260°C for 5 secs max.	LED Wave Length:	Yellow: $587 \pm 7$ nm measured at 20mA Green: $565 \pm 6$ nm measured at 20mA
<b>Operating Temperature:</b>		-55°C to + 85°C		Red: 625 $\pm$ 5 nm measured at 20mA
UL File:		E135615		

### **ORDERING INFORMATION**

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# **RJESE** TAB UP, RJ45 & RJ11, STANDARD PROFILE

#### RJESE-808X-X1

#### Single Port Non-Shielded



Shielded

RJESE-848X-X1



#### Didn't find what you were looking for?

Please contact sales@amphenolcanada.com and let us know what you need.



# **Multi Port**

RJESE-808X-X4

RJESE-838X-X4



#### Shielded

.070 [1.78]

2.510 [63.75] .620 [15.75] -IED 2 IFD 1 Amphenol Amphenol Amphenol Amphenol .100 [2.54] .530 [13.46] .125 [3.18] .105 [2.67] ŧ .215 [5.46] PURF-TIN **FRONT VIEW SIDE VIEW** DIPPED ZONE Ø.035±.002 [Ø0.89±0.05] .620 [15.75] TYP. HOLES 48 REQ'D (BASED ON 2 LEDS PER PORT) .540 [13.72] TYP. .090 [2.29] TYP. .620 .170 [4.32] .020 [0.51] [15.75] .360 [9.14] ø.062±.002 φ - 4 [ø1.57±0.05] .400 [10.16] HOLES 4 REQ'D <del>+ + + +</del>  $\frac{1}{2}$ .110 [2.79] LOCATE HOLES .100 [2.54] **♦**ø.005[0.13] .040 [1.02] TYP. POSITION DIMENSIONS .135 [3.43] .080 [2.03] TYP. ARE BASIC .280 [7.11] TYP. ø.128±.002 [ø3.25±0.05] .620 [15.75] TYP. HOLES 2 REQ'D .870 [22.10]

**RECOMMENDED PCB LAYOUT** 

2.360 [59.94]

2.500 [63.50]



#### **TAB UP, SLIM PROFILE**

RJE29 series is designed to meet a wide variety of applications. Available in multiple positions and contacts to support basic telecom and Ethernet protocols. Shielding is available for increased EMI performance.

### **SPECIFICATIONS**

Material	
Insulator:	High temp. thermoplastic; Complies with UL 94V-0; Black
Contacts:	Phosphor bronze hard temper with gold thickness options ( $6\mu$ , 1 $5\mu$ , 3 $0\mu$ , 5 $0\mu$ ) over 5 $0\mu$ min. nickel on contact mating area; 10 $0\mu$ min. matte tin plating on soldering tail
Shield:	Stainless steel with tin dipped tails
LED:	Tin plating on LED tails

Mechanical	
Insertion Force:	4 contacts: 1.8 Kgf Max 6 contacts: 2.1 Kgf Max 8 contacts: 2.3 Kgf Max 10 contacts: 2.5Kgf Max
Pull Retention Force:	20 lbs min.
Durability:	750 mating & unmating cycles with 50u"
Recommended Soldering Temperature:	Wave soldering peaked at 260°C for 5 secs max.
<b>Operating Temperature:</b>	-40°C to + 85°C
UL File Number:	E136228

Electrical	
Contact Resistance:	40 mΩ max.
Insulation resistance:	500 M $\Omega$ min. at 100V DC
Current Rating:	1.5 Amps
Voltage Rating:	150 Volts AC
DWV:	1000 VAC, 60 Hz. 1 min.

### **ORDERING INFORMATION**



#### Didn't find what you were looking for?

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Shielded





#### **SIDE VIEW**

RJE29-188-1X10



#### **RECOMMENDED PCB LAYOUT**

TAB UP, SINGLE PORT, LOW PROFILE, WITH LEDs

### TAB UP, SINGLE PORT, LOW PROFILE, WITH LEDs

Single port through-hole (THT) series with multiple shield and LED options. Similar to our single port RJHSE series, but with a slightly lower profile and longer body. Inverted latch orientation for easy mating with industry standard plugs.

**Electrical** 

#### **SPECIFICATIONS**

Material	
Insulator:	High temp. thermoplastic; Complies with UL 94V-0; Black
Contacts:	Phosphor bronze hard temper with gold thickness options ( $6\mu$ , 1 $5\mu$ , 3 $0\mu$ , 5 $0\mu$ ) over 5 $0\mu$ min. nickel on contact mating area; 10 $0\mu$ min. matte tin plating on soldering tail
Shield:	Stainless steel with tin dipped tails
LED:	Tin plating on LED tails

Mechanical	
Insertion Force:	5 lbs max.
Pull Retention Force:	20 lbs min.
Durability:	750 mating & unmating cycles
Recommended Soldering Temperature:	Wave soldering peaked at 260°C for 5 secs max.
<b>Operating Temperature:</b>	-55°C to + 85°C
UL File Number:	E135615

<b>Contact Resistance:</b>	20 mΩ max.
Insulation resistance:	500 $M\Omega$ min. at 500V DC for 2 mins max.
Current Rating:	1.5 Amps per contact
Voltage Rating:	125 Volts AC
DWV:	1000 VAC, 60 Hz. 1 min.
LED Forward DC Current :	20mA typical
LED Forward Voltage:	2.6 Volts max. at 2mA
LED Reverse Voltage:	5 Volts min.
LED Light Intensity:	0.4 to 1.5 mcd min. at 2mA (for single colours) 0.5 mcd min. at 2mA (for bicolours)
LED Wave Length:	Yellow: 585 $\pm$ 7 nm measured at 20mA Green: 568 $\pm$ 6 nm measured at 20mA Red: 640 $\pm$ 5 nm measured at 20mA

Note: Connectors without LEDs are suitable for IR Reflow

#### **ORDERING INFORMATION**



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# RJE37 TAB UP, SINGLE PORT, LOW PROFILE, WITH LEDS

# **Single Port**

RJE37-188-0XX0



#### **Shielded - With Full Tabs**

RJE37-188-1XX0



Shielded - With Top Tabs Only





**RJE39** TAB UP, NARROW, TWO AND EIGHT PORT

### TAB UP, NARROW, TWO AND EIGHT PORT

Single and eight port through-hole (THT) series with multiple shield and LED options. Similar to the RJHSE series, but with a narrower profile. This series is ideal for programs that need multiple connectors, but have limited PCB space.

#### **SPECIFICATIONS**

Material	
Insulator:	High temp. thermoplastic; Complies with UL 94V-0; Black
Contacts:	Phosphor bronze hard temper with gold thickness options ( $6\mu$ ", $15\mu$ ", $30\mu$ ", $50\mu$ ") over $50\mu$ " min. nickel on contact mating area; $100\mu$ " min. matte tin plating on soldering tail
Shield:	Stainless steel with tin dipped tails
LED:	Tin plating on LED tails

Mechanical	
Insertion Force:	5 lbs max.
Pull Retention Force:	20 lbs min.
Durability:	750 mating & unmating cycles
Recommended Soldering Temperature:	Wave soldering peaked at 260°C for 5 secs max.
<b>Operating Temperature:</b>	-55°C to + 85°C
UL File Number:	E135615

#### Electrical

<b>Contact Resistance:</b>	20 mΩ max.
Insulation resistance:	500 $M\Omega$ min. at 500V DC for 2 mins max.
Current Rating:	1.5 Amps per contact
Voltage Rating:	125 Volts AC
DWV:	1000 VAC, 60 Hz. 1 min.
LED Forward DC Current:	20mA typical
LED Forward Voltage:	2.6 Volts max. at 2mA (for single colour)
LED Reverse Voltage:	5 Volts min.
LED Light Intensity:	4.5 to 6.0 mcd min. at 20mA (for single colours)
LED Wave Length:	Yellow: 588 $\pm$ 7 nm measured at 20mA Green: 570 $\pm$ 6 nm measured at 20mA Red: 628 $\pm$ 5 nm measured at 20mA

Note: Connectors without LEDs are suitable for IR Reflow

# **ORDERING INFORMATION**



#### Didn't find what you were looking for?

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# RJE39

TAB UP, NARROW, TWO AND EIGHT PORT



**Eight Port** 

RJE39-888-1XX0



# TAB UP, RJ11 (SIX POSITION)

The RJE01 series of 6-position jacks are designed for superior EMI performance. The inverted connector provides shorter leads, eliminating the EMI antenna effect of the standard connector footprint. Typical performance improvement over their standard connector counterparts is 5-10 dB over the frequency range.

#### **SPECIFICATIONS**

Material		
Insulator:	High temp. thermoplastic; Complies with UL 94V-0; Black	
Contacts:	Phosphor bronze hard temper with gold thickness options ( $6\mu$ ", $15\mu$ ", $30\mu$ ", $50\mu$ ") over $50\mu$ " min. nickel on contact mating area; $100\mu$ " min. matte tin plating on soldering tail	
Shield:	Stainless steel with tin dipped tails	
Electrical		
Contact Resist	tance:	20 mΩ max.
Insulation res	istance:	500 $M\Omega$ min. at 500V DC for 2 mins max.
Current Rating:		1.5 Amps per contact
Voltage Rating:		125 Volts AC

1000 VAC, 60 Hz. 1 min.

Mechanical	
Insertion Force:	5 lbs max.
Pull Retention Force:	20 lbs min.
Durability:	750 mating & unmating cycles
Recommended Soldering Temperature:	Wave soldering peaked at 260°C for 5 secs max.
<b>Operating Temperature:</b>	-55°C to + 85°C
UL File #:	E135615
CSA File #:	LR685398

#### **ORDERING INFORMATION**

DWV:



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RJE01

TAB UP, RJ11 (SIX POSITION)

# **RJE01** TAB UP, RJ11 (SIX POSITION)

# **Single Port**



.200 [5.08]

.375 [9.52]

.495 [12.57]

LOCATE HOLES

**♦**ø.005[0.13]

ARE BASIC

**RECOMMENDED PCB LAYOUT** 

POSITION DIMENSIONS

T 

**SIDE VIEW** 

.313 [7.95] -

**FRONT VIEW** 

### Multi Port



TIN DIPPED

**ZONE** 



RJSBE

TAB DOWN, 1, 2 AND 4 PORT WITH LEDs

# TAB DOWN, 1, 2 AND 4 PORT WITH LEDs

The RJSBE series of modular jacks supports Ethernet Protocols. Shielding is available with or without a ferrite filter for increased EMI performance and LEDs for link activity and network speed verification.

# **SPECIFICATIONS**

Material				
Insulator:	High temp. thermoplastic; Complies with UL 94V-0; Black			
Contacts:	Phosphor bronze hard temper with gold thickness options ( $6\mu$ ", $15\mu$ ", $30\mu$ ", $50\mu$ ") over $50\mu$ " min. nickel on contact mating area; $100\mu$ " min. matte tin plating on soldering tail			
Shield:	Copper alloy; nickel plated with tin dipped tails			
LED:	Tin plating on LED tails			
Mechanical				
Insertion Forc	e:	5 lbs max.		
<b>Pull Retention</b>	Force:	20 lbs min.		
Durability:		750 mating & unmating cycles		
Recommende Soldering Ten	-	Wave soldering peaked at 260°C for 5 secs max.		
<b>Operating Ter</b>	nperature:	-55°C to + 85°C		
UL File #:		E135615		
CSA File #:		LR685398		

Electrical	
Contact Resistance:	20 mΩ max.
Insulation resistance:	500 $M\Omega$ min. at 500V DC for 2 mins max.
<b>Current Rating:</b>	1.5 Amps per contact
Voltage Rating:	125 Volts AC
DWV:	1000 VAC, 60 Hz. 1 min.
LED Forward DC Current:	20mA typical
LED Forward Voltage:	1.9 Volts max. at 2mA (for single colours) 2.6 Volts max. at 2mA (for bicolours)
LED Reverse Voltage:	5 Volts min.
LED Light Intensity:	0.4 to 1.5 mcd min. at 2mA (for single colours) 0.5 mcd min. at 2mA (for bicolours)
LED Wave Length:	Yellow: 587 $\pm$ 7 nm measured at 20mA Green: 565 $\pm$ 6 nm measured at 20mA Red: 625 $\pm$ 5 nm measured at 20mA

#### Note: Connectors without LEDs are suitable for IR Reflow

### **ORDERING INFORMATION**



#### Didn't find what you were looking for?

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# **Single Port**

RJSBE-508X-C1





# TAB DOWN, 1, 2 AND 4 PORT WITH LEDs

#### **Multi Port**

#### RJSBE-508X-C4





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### TAB DOWN, FILTERED AND SHIELDED

The FRJAE series of shielded and filtered modular jacks offer low cost and effective EMC control within standard RJ11 & RJ45 connector footprints. EMC control is offered by a completely shielded connector and/or with the use of a high resistivity, high impedance ferrite filter. No board layout changes are required for its use. Simply replace the standard non-filtered connector for superior EMC performance.



# **SPECIFICATIONS**

Material	
Insulator:	High temp. thermoplastic; Complies with UL 94V-0; Black
Contacts:	Phosphor bronze hard temper with gold thickness options ( $6\mu$ ", $15\mu$ ", $30\mu$ ", $50\mu$ ") over $50\mu$ " min. nickel on contact mating area; $100\mu$ " min. matte tin plating on soldering tail
Shield:	Copper alloy; nickel plated with tin dipped tails
Filter:	High impedance, high resistivity ferrite filter

#### **IMPEDANCE CHARACTERISTICS**



# ORDERING INFORMATION

Electrical	
<b>Contact Resistance:</b>	20 mΩ max.
Insulation resistance:	500 $M\Omega$ min. at 500V DC for 2 mins max.
<b>Current Rating:</b>	1.5 Amps per contact
Voltage Rating:	125 Volts AC
DWV:	1000 VAC, 60 Hz. 1 min.

Mechanical	
Insertion Force:	5 lbs max.
Pull Retention Force:	20 lbs min.
Durability:	750 mating & unmating cycles
Recommended Soldering Temperature:	Wave soldering peaked at 260°C for 5 secs max.
	51
Soldering Temperature:	secs max.

FRJAE - XXX - X	X
Version	Number of Ports
4 - 8 Positions	Blank - 1 Port
6 - 6 Positions	02 - 2 Ports
	04 - 4 Ports
Shield Options	06 - 6 Ports
0 - Non-filtered without shield	08 - 8 Ports
1 - Filtered with front tab shield 3 - Non-filtered with front tab shield	Number of Contacts
4 - Filtered without shield	2 - 2 Contacts
6 - Filtered with rear tab shield	4 - 4 Contacts
7 - Filtered without PCB tails shield	6 - 6 Contacts
8 - Non-filtered with rear tab shield	8 - 8 Contacts

Didn't find what you were looking for?

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# **FRJAE** TAB DOWN, FILTERED AND SHIELDED







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# **Multi Port**

FRJAE-418-0X





**Notes** 

# TAB DOWN, SINGLE PORT, HIGH PROFILE

RJE02 series is a group of products within a family of standard modular jacks designed to meet requirements for a variety of applications options within the RJE02 family include options with and without a panel stops, and RJ11 & RJ45 configurations.

# **SPECIFICATIONS**

**Material** 

DWV:

material		
	High temp. thermoplastic; Complies with UL 94V-0; Black	
	Phosphor bronze hard temper with gold thickness options ( $6\mu$ ", $15\mu$ ", $30\mu$ ", $50\mu$ ") over $50\mu$ " min. nickel on contact mating area; $100\mu$ " min. matte tin plating on soldering tail	
Shield:	Copper alloy; nickel plated with tin dipped tail	
Electrical		
Contact Resista	ance:	20 mΩ max.
Insulation resis	tance:	500 M $\Omega$ min. at 500V DC for 2 mins max.
Current Rating	:	1.5 Amps per contact
Voltage Rating	:	125 Volts AC

1500 VAC, 60 Hz. 1 min.

#### Mechanical Insertion Force: Pull Retention For

Insertion Force:	5 lbs max.
Pull Retention Force:	20 lbs min.
Durability:	750 mating & unmating cycles
Recommended Soldering Temperature:	Wave soldering peaked at 260°C for 5 secs max.
<b>Operating Temperature:</b>	- 40°C to + 85°C
UL File Number:	E136228

Note: Connectors with high temp. material are suitable for IR Reflow

# ORDERING INFORMATION



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# RJE02 TAB DOWN, SINGLE PORT, HIGH PROFILE



# Single Port

**RJE02-1XX-0X20** 





Part #	No. of	No. of			Dimension	S	
Furt #	Positions	Contacts	A	В	С	D	E
RJE02-142-0X20	4	2	.540 [13.72]	.440 [11.18]	.309 [7.85]	.300 [7.62]	.050 [1.27]
RJE02-144-0X20	4	4	.540 [13.72]	.440 [11.18]	.309 [7.85]	.300 [7.62]	.150 [3.81]
RJE02-162-0X20	6	2	.620 [15.75]	.520 [13.21]	.389 [9.88]	.400 [10.16]	.050 [1.27]
RJE02-164-0X20	6	4	.620 [15.75]	.520 [13.21]	.389 [9.88]	.400 [10.16]	.150 [3.81]
RJE02-166-0X20	6	6	.620 [15.75]	.520 [13.21]	.389 [9.88]	.400 [10.16]	.150 [3.81]
RJE02-188-0X20	8	8	.700 [17.78]	.600 [15.24]	.469 [11.91]	.450 [11.43]	.350 [8.89]

**Notes** 

RJE03

#### TAB DOWN, SINGLE PORT, LOW PROFILE

### TAB DOWN, SINGLE PORT, LOW PROFILE

RE03 series is a group of products within a family of standard modular jacks designed to meet requirements for a variety of applications. Options within the RJE03 family include shielded and non-shielded, and RJ11 & RJ45 configurations.

#### **SPECIFICATIONS**

Material		
	High temp. thermoplastic; Complies with UL 94V-0; Black	
	Phosphor bronze hard temper with gold thickness options ( $6\mu$ , $15\mu$ , $30\mu$ , $50\mu$ ) over $50\mu$ min. nickel on contact mating area; $100\mu$ min. matte tin plating on soldering tail	
Shield:	Copper alloy; nickel plated with tin dipped tail	
Electrical		
<b>Contact Resista</b>	nce:	20 mΩ max.
Insulation resis	tance:	500 $M\Omega$ min. at 500V DC for 2 mins max.
Current Rating	•	1.5 Amps per contact

125 Volts AC

1000 VAC, 60 Hz. 1 min.

Mechanical	
Insertion Force:	5 lbs max.
Pull Retention Force:	20 lbs min.
Durability:	750 mating & unmating cycles
Recommended Soldering Temperature:	Wave soldering peaked at 260°C for 5 secs max.
<b>Operating Temperature:</b>	- 40°C to + 85°C
UL File Number:	E136228

Note: Connectors with high temp. material are suitable for IR Reflow

### **ORDERING INFORMATION**

**Voltage Rating:** 

**DWV**:



#### Didn't find what you were looking for?

Please contact sales@amphenolcanada.com and let us know what you need.



# **Single Port**

#### RJE03-188-0X10



#### **Shielded with Panel Stop**

#### RJE03-188-2X20



Notes



### TAB DOWN, ULTRA LOW PROFILE

RJE05 series is a group of products within a family of standard modular jacks designed to meet requirements for a variety of applications. Options within the RJE05 family include shielded or non-shielded, and RJ11 & RJ45 configurations.

### **SPECIFICATIONS**

Material	
Insulator:	High temp. thermoplastic; Complies with UL 94V-0; Black
Contacts:	Phosphor bronze hard temper with gold thickness options ( $6\mu$ ", $15\mu$ ", $30\mu$ ", $50\mu$ ") over $50\mu$ " min. nickel on contact mating area; $100\mu$ " min. matte tin plating on soldering tail
Shield:	Copper alloy; nickel plated with tin dipped tail

5 lbs max.
20 lbs min.
750 mating & unmating cycles
Wave soldering peaked at 260°C for 5 secs max.
- 40°C to + 85°C
E135615

Note: Connectors with high temp material are suitable for IR Reflow

Electrical	
<b>Contact Resistance:</b>	20 mΩ max.
Insulation resistance:	500 M $\Omega$ min. at 500V DC for 2 mins max.
Current Rating:	1.5 Amps per contact
Voltage Rating:	125 Volts AC
DWV:	1000 VAC, 60 Hz. 1 min.

#### **ORDERING INFORMATION**



8 - Shield with rear PCB tabs, no top or side tabs

#### Didn't find what you were looking for?

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# Single Port

#### RJE05-188-0X10

Ø.035 [Ø0.89] HOLES 8 REQ'D





.350 [8.89]

.100 [2.54] TYP.

.050 [1.27] TYP. -

**RECOMMENDED PCB LAYOUT** 

#### **Shielded with Front PCB Tabs**





**FRONT VIEW** 

SIDE VIEW









### **TAB DOWN, STANDARD PROFILE**

RJE09 series is a group of products within a family of standard modular jacks designed to meet requirements for a variety of applications. Options with the RJE09 family include shielded & non-shielded, and RJ11 & RJ45.

# **SPECIFICATIONS**

Material	
Insulator:	High temp. thermoplastic; Complies with UL 94V-0; Black
Contacts:	Phosphor bronze hard temper with gold thickness options (6 $\mu$ ", 15 $\mu$ ", 30 $\mu$ ", 50 $\mu$ ") over 50 $\mu$ " min. nickel on contact mating area; 100 $\mu$ " min. matte tin or gold flash plating on soldering tail
Shield:	Copper alloy; nickel plated allover

Mechanical	
Insertion Force:	5 lbs max.
Pull Retention Force:	20 lbs min.
Durability:	750 mating & unmating cycles
Recommended Soldering Temperature:	Wave soldering peaked at 260°C for 5 to 8 secs max.
<b>Operating Temperature:</b>	- 40°C to + 70°C
UL File #:	E136228

Electrical	
<b>Contact Resistance:</b>	20 mΩ max.
Insulation resistance:	500 $M\Omega$ min. at 500V DC for 2 mins max.
Current Rating:	1.5 Amps per contact
Voltage Rating:	125 Volts AC
DWV:	1000 VAC, 60 Hz. 1 min.

#### **ORDERING INFORMATION**

	RJE09 - X X X - X	X X O
Number of Ports		Modifier
1 -1 Port 2 - 2 Ports		0 - Standard product
4 - 4 Ports		Panel Stop Options
6 - 6 Ports		1 - No panel stop
8 - 8 Ports		2 - With panel stop
Number of Positions		Contact Plating
6 - 6 Positions		1 - 6µ" gold plating
8 - 8 Positions		2 - 15µ" gold plating
A - 10 Positions		3 - 30µ" gold plating
		4 - 50µ" gold plating
Number of Contacts		Shield Options
4 - 4 Contacts		-
6 - 6 Contacts		0 - No shield
8 - 8 Contacts		1 - Shield with rear PCB tabs, no top or side tab
A - 10 Contacts		5 - Shield with top, side, and front PCB tabs
		8 - Shield with front PCB tabs, no top or side tal

#### Didn't find what you were looking for?

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# RJE09 TAB DOWN, STANDARD PROFILE

# Single Port

#### RJE09-1AA-0X10

RJE09-188-1X10







**Shielded** 

RJE09-188-5X10



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# **RJE09** TAB DOWN, STANDARD PROFILE

#### RJE09-288-0X10

# Multi Port

**Non-Shielded** 





-.550 [13.97] TYP.

.108 [2.73]



ø.128+.002

[ø3.25±0.05] HOLES 3 REQ'D



#### Shielded

#### RJE09-888-1X10

LOCATE HOLES

♦Ø.005[0.13] POSITION DIMENSIONS

34

ARE BASIC



- 4.300 [109.22]

- 4.515 [114.67]

**RECOMMENDED PCB LAYOUT** 



# TAB DOWN, RECESSED, LOW PROFILE

RJULE is a series of single port RJ45 modular jacks designed for slim profile applications. With a profile height of less than 10 millimeters, this connector is perfect where vertical space is limited. Standard and rear mount shield options for superior EMI performance makes this part ideal for LAN and router applications.

# **SPECIFICATIONS**

Material			Mechanical	
Housing:	•	mp. thermoplastic; bility rating UL94-0; RoSH compliant	Insertion Force:	5 lbs max.
Contacts:		, , , ,	Pull Retention Force:	20 lbs min.
	•	or bronze	Durability:	750 mating & unmating cycles
Plating:	microns	ated on mating surfaces over 50μ" (1.27 ε) min. nickel under plate; 100μ" (2.54 microns) atte tin on contact tails	Recommended Soldering Temperature:	Wave soldering peaked at 260°C for 5 secs max.
Shield:	Copper	alloy; nickel plated	<b>Operating Temperature:</b>	-55°C to + 85°C
Electrical			UL File #:	E135615
Contact Resi Insulation re	stance:	20 m $\Omega$ max. 500 M $\Omega$ min. at 500 VDC for 2 mins max.	Note: Suitable for IR Reflow	
Current Ratio	ng:	1.5 Amps per contact		
Voltage Rati	ng:	125 Volts AC		

### **ORDERING INFORMATION**

DWV:

Number of Positions	Packaging
4 - 8 Positions	Blank - Tray
Contact Plating	T - Tape & Reel
$0 - 1 \sim 3\mu''$ gold plating	Number of Ports
$1 - 15\mu''$ gold plating	01- 1 Port
2 - 30µ″ gold plating	Chield On the se
3 - 50µ" gold plating	Shield Options
Housing Options	0 - No shield 1 - Shield with top, side, and rear PCB ta
1 - Black	2 - Shield with flared side tabs
2 - Yellow	3 - Shield with rear PCB, no top or side t
3 - Red	
Number of Contacts	
4 - 4 Contacts	
6 - 6 Contacts	

#### Didn't find what you were looking for?

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1000 VAC, 60 Hz. 1 min.
THROUGH - HOLE

# TAB DOWN, RECESSED, LOW PROFILE

#### RJULE-4X180-01









**FRONT VIEW** 

**SIDE VIEW** 

#### **Shielded with Side Ground Tabs**





RJULE-4X182-01



**RECOMMENDED PCB LAYOUT** 

#### **Standard Shield**

**FRONT VIEW** 





#### RJULE-4X181-01



#### **RECOMMENDED PCB LAYOUT**

RJE73 TAB DOWN, SINGLE PORT, LOW PROFILE, WITH LEDS

### TAB DOWN, SINGLE PORT, LOW PROFILE

The RJE73 modular jack is a low profile RJ45 with LEDs and superior EMI shielding with a small footprint for space sensitive designs. This connector features built-in LEDs that provide link activity and network verification. This product is ideal for LAN applications such as adapter cards and routers.

### **SPECIFICATIONS**

Insulator:High temp. thermoplastic; Complies with UL94-0; BlackContact Resistance:20 mΩ max.Contacts:Phosphor bronze hard temper with gold plating options over 50µ" min. nickel on contact mating area; 100µ" min. matte tin plating on solder tailsInsulation resistance:500 MΩ min. at 500V DC for 2 mins matterShield:Stainless steel with tin dipped tailsCurrent Rating:1.0 Amps per contactLED:Tin plating on LED tailsDWV:1000 VAC, 60 Hz. 1 min.
Contacts:Phosphor bronze hard temper with gold plating options over 50μ" min. nickel on contact mating area; 100μ" min. matte tin plating on solder tailsStor MCTHIN. at 500V DC 1072 mins mathe Current Rating:Shield:Stainless steel with tin dipped tailsCurrent Rating:1.0 Amps per contactLED:Tin plating on LED tailsDWV:1000 VAC, 60 Hz. 1 min.
options over 50μ" min. nickel on contact mating area; 100μ" min. matte tin plating on solder tailsCurrent Rating:1.0 Amps per contactShield:Stainless steel with tin dipped tailsVoltage Rating:1.25 Volts ACLED:Tin plating on LED tailsLED Forward DC20mA typical
Shield:     Stainless steel with tin dipped tails     DWV:     1000 VAC, 60 Hz. 1 min.       LED:     Tin plating on LED tails     LED Forward DC     20mA typical
LED:     Tin plating on LED tails     LED Forward DC     20mA typical
Current
MechanicalLED Forward Voltage:1.9 Volts max. at 2mA (for single colou 2.6 Volts max. at 2mA (for bicolours)Insertion Force:5 lbs max.5 lbs max.2 mA (for bicolours)
Pull Retention Force:       20 lbs min.         LED Reverse Voltage:       5 Volts min.
Durability:       750 mating & unmating cycles    LED Light Intensity:          0.4 to 1.5 mcd min. at 2mA (for single colours)
RecommendedWave soldering peaked at 245°C for 8 to0.5 mcd min. at 2mA (for bicolours)
Soldering Temperature:10 secs max.LED Wave Length:Yellow: 587 ± 7 nm measured at 20mA
Operating Temperature:-55°C to + 85°CGreen: 565 ± 6 nm measured at 20mARed: 625 ± 5 nm measured at 20mA
UL File #: E135615

### **ORDERING INFORMATION**



#### Didn't find what you were looking for?

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# TAB DOWN, SINGLE PORT, LOW PROFILE, WITH LEDS

#### RJE73-188-00XX0

Single Port Shielded - No Top or Side Tabs



#### **Shielded - With Top and Side Tabs**

**FRONT VIEW** 

#### RJE73-188-00XX1

38



**RECOMMENDED PCB LAYOUT** 

**SIDE VIEW** 



### TAB UP, WITH LIGHT PIPES

The RJSSE series represents an expansion of Amphenol Canada's current RJHSE series connector. The RJSSE offers all the benefits of the RJHSE series in SMT with light pipes. Shielded and non-shielded versions are available with or without light pipes.

### **SPECIFICATIONS**

Material			
Insulator:	High temp. thermoplastic; Complies with UL94-0; Black		
Contacts:	options	Phosphor bronze hard temper with gold plating options over $50\mu''$ min. nickel on contact mating area; $100\mu''$ min. matte tin plating on solder tails	
Shield:	Copper	Copper alloy; nickel or matte tin plating	
Light Pipe:	Optical polycarbonate; UL 94V-0		
Electrical			
<b>Contact Resist</b>	ance:	20 mΩ max.	
Insulation resi	istance: 500 M $\Omega$ min. at 500V DC for 2 mins max.		

1.5 Amps per contact

1500 VAC, 60 Hz. 1 min.

125 Volts AC

Mechanical	
Insertion Force:	5 lbs max.
Pull Retention Force:	20 lbs min.
Durability:	750 mating & unmating cycles
Recommended Soldering Temperature:	IR Reflow peaked at 260°C for 5 to 10 secs max.
Operating Temperature:	-55°C to + 85°C
UL File #:	E135615

Note: Light Pipes to be installed after soldering

### **ORDERING INFORMATION**

**Current Rating:** 

**Voltage Rating:** 

DWV:



**Note:** The light pipes are available to be purchased on their own. Part Number: RJSSE-2485-01

#### Didn't find what you were looking for?

Please contact sales@amphenolcanada.com and let us know what you need.



TAB UP, WITH LIGHT PIPES



#### **Standard Shield - With Top & Side Ground Tabs**

**RJSSE-5381** 





FOR REFERENCE







### **Multi Port**

#### THIS LIGHT PIPE IS Shielded -.893 [22.68]-INTENDED FOR POST .065 [1.65] REFLOW INSERTION 1.270 [32.26] .620 [15.75] INTO THE CONNECTOR rÆ ASSEMBLY Amphenol .055 [1.40] Ampheno ſ .525 [13.34] TERMINAL TAILS .088 [2.24] MAX. .060 -.100 [2.54] [1.51] .027 [0.70] **FRONT VIEW SIDE VIEW** FOR REFERENCE .620 [15.75] TYP. .050 [1.27] TYP. .429 [10.90] TYP. .022 [0.56] (32 PLCS) .191 [4.85] .090 X .090 [2.29 X 2.29] LIGHT ENTRANCE AREAS OF LIGHT PIPES <sub>-.100</sub> [2.54] <del>6</del>8 68 .064 [1.63] .564 .035 [0.90] .678 [14.31] [17.22] .125 [3.18] TYP. LOCATE HOLES **♦**ø.005[0.13] ⊕ POSITION DIMENSIONS ARE BASIC .118 [3.00] ø.106±.002 .075 [1.92] [ø2.69±0.05] CONNECTOR -HOLES 2 REQ'D OUTLINE .245 [6.22] TYP -.950 [24.14]-**RECOMMENDED PCB LAYOUT** -1.120 [28.45]

#### RJSSE-5381-02

### TAB UP, STANDARD PROFILE, WITH LEDs

The RJCSE is a right angle surface mount connector. Shielding is available for increased EMI performance as well as built-in LEDs for link activity and network verification. This product is ideal for LAN applications such as adapter cards and routers.

### **SPECIFICATIONS**

Material		
Insulator:	High temp. thermoplastic; Complies with UL 94V-0; Black	
Contacts:	Phosphor bronze hard temper with gold thickness options ( $6\mu$ ", $15\mu$ ", $30\mu$ ", $50\mu$ ") over $50\mu$ " min. nickel on contact mating area; $100\mu$ " min. matte tin plating on soldering tail	
Shield:	Stainless steel with matte-tin plating	
Mechanica	ıl	
Insertion Ford	:e:	5 lbs max.
<b>Pull Retention</b>	n Force:	20 lbs min.
Durability:		750 mating & unmating cycles
Recommende Soldering Ten		Suitable for IR Reflow at 260°C for 10 secs max.
<b>Operating</b> Ter	nperature:	- 55°C to + 85°C
UL File #:		E135615
CSA File #:		LR685398

#### Electrical Contact Resistan

Contact Resistance:	20 mΩ max.
Insulation resistance:	500 $M\Omega$ min. at 500V DC for 2 mins max.
Current Rating:	1.5 Amps per contact
Voltage Rating:	125 Volts AC
DWV:	1000 VAC, 60 Hz. 1 min.
LED Forward DC Current:	20mA typical
LED Forward Voltage:	1.9 Volts max. at 2mA (for single colours) 2.6 Volts max. at 2mA (for bicolours)
LED Reverse Voltage:	5 Volts min.
LED Light Intensity:	0.4 to 1.5 mcd min. at 2mA (for single colours) 0.5 mcd min. at 2mA (for bicolours)
LED Wave Length:	Yellow: 587 $\pm$ 7 nm measured at 20mA Green: 565 $\pm$ 6 nm measured at 20mA Red: 625 $\pm$ 5 nm measured at 20mA

### **ORDERING INFORMATION**

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RJCS

TAB UP, STANDARD PROFILE, WITH LEDS



### Single Port Non-Shielded

.040 [1.02] -.085 [2.15] .024 [0.61] TYP LED 1 - .599 [15.22] -.050 [1.27] LED 2 --.624 [15.86]-.120 12 [3.05] .425 .393 [10.80] [9.98] Amphenol .572 .519 [14.54] [13.18] ø.128±.002 [ø3.25±0.05] ........ - .500 [12.70] -.200 [5.08] **SIDE VIEW RECOMMENDED PCB LAYOUT FRONT VIEW** 

Shielded

RJCSE-538X-01



**FRONT VIEW** 

**SIDE VIEW** 

#### **RECOMMENDED PCB LAYOUT**

**RJCSE-508X-01** 





5 lbs max.

20 lbs min.

- 55°C to + 85°C

E135615

LR685398

-260°C max

-230°C

150

4°C/s max

750 mating & unmating cycles

10s max

30~50s

200

Lead free reflow soldering up to 260°C

4°C/s max

250

300

for 10 secs max. 3 reflow passes max.

### **TAB DOWN, ULTRA LOW PROFILE**

The RJLSE series contains surface mount modular jacks with superior EMI performance that supports Ethernet Protocols. This low profile connector is built to meet your high volume RJ requirements. This series is a true pick and place compatible SMT connector and is available with different shielding, contacts, gold plating thickness, and color options. This connector is built with high temperature engineering thermoplastic and suitable for the IR Reflow solder process.



### **SPECIFICATIONS**

Material	
Insulator:	High temp. thermoplastic; Complies with UL 94V-0; Black
Contacts:	Phosphor bronze hard temper with gold thickness options ( $6\mu$ ", $15\mu$ ", $30\mu$ ", $50\mu$ ") over $50\mu$ " min. nickel on contact mating area; Gold flash over palladium nickel also available; $100\mu$ " min. matte tin plating on soldering tail
Shield:	Copper alloy; nickel or matte tin plated
Note: Other inc	sulator colour options quailable

Note: Other insulator colour options available

Electrical	
<b>Contact Resistance:</b>	20 mΩ max.
Insulation resistance:	500 $M\Omega$ min. at 500V DC for 2 mins max.
Current Rating:	1.5 Amps per contact
Voltage Rating:	125 Volts AC
DWV:	1000 VAC, 60 Hz. 1 min.

### **ORDERING INFORMATION**

RJLSE - X X X X - 01 - 2	Time (sec)
Version	Packaging
4 - 8 Positions	Blanks - Tray
6 - 6 Positions	T - Tape & Reel
Contact Plating	Number of Ports
0 - 1~3µ"gold plating	01 - 1 Port
1 - 15µ" gold plating	Housing Outlong
2 - 30µ" gold plating	Housing Options
3 - 50μ" gold plating	1 - Black
Shield Ontions	2 - Yellow
Shield Options	3 - Red
0 - No shield with hold-down bracket 1 - Standard shield, SMT without PCB tabs	Number of Contacts
3 - Shield with PCB tabs	2 - 2 Contacts
5 - Shield with FCB tabs	4 - 4 Contacts
	6 - 6 Contacts
	8 - 8 Contacts
find what you were looking for?	
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**Mechanical Insertion Force:** 

**Durability:** 

UL File #:

CSA File #:

300-

250

200

150 -

100 50 25°C

0

Temperature (°C)

Recommended

**Pull Retention Force:** 

Soldering Temperature:

**Operating Temperature:** 

4°C/s max

Recommended reflow profile below

50

150~180°C

60~120s

100

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#### Single Port Non-Shielded

RJLSE-6X061-01



**SIDE VIEW** 

**FRONT VIEW** 

**RECOMMENDED PCB LAYOUT** 

Shielded

RJLSE-4X381-01



**FRONT VIEW** 

**SIDE VIEW** 

**RECOMMENDED PCB LAYOUT** 



#### **TAB DOWN, SINGLE PORT**

RJE07 products belong to a family of standard modular jacks designed to meet requirements for a variety of applications. Options within the FRJAE series offer low cost and effective EMC control within standard RJ11 & RJ45 connector footprints. EMC control is offered by a completely shielded connector and/or with the use of a high resistivity, high impedance ferrite filter. No board layout changes are required for its use. Simply replace the standard non-filtered connector for superior EMC performance.



### **SPECIFICATIONS**

Material	
Insulator:	High temp. thermoplastic; Complies with UL 94V-0; Black
Contacts:	Phosphor bronze hard temper with gold thickness options ( $6\mu$ ", 15 $\mu$ ", 30 $\mu$ ", 50 $\mu$ ") over 50 $\mu$ " min. nickel on contact mating area; Gold flash over palladium nickel also available; 100 $\mu$ " min. matte tin plating on soldering tail
Shield:	Copper alloy; nickel or matte tin plated

Mechanical	
Insertion Force:	5 lbs max.
Pull Retention Force:	20 lbs min.
Durability:	750 mating & unmating cycles
Recommended Soldering Temperature:	Reflow soldering peaked at 260°C for 6 to 8 secs max
<b>Operating Temperature:</b>	- 40°C to + 85°C
UL File Number:	E136228

Electrical	
<b>Contact Resistance:</b>	20 mΩ max.
Insulation resistance:	500 $M\Omega$ min. at 500V DC for 2 mins max.
<b>Current Rating:</b>	1.5 Amps per contact
Voltage Rating:	125 Volts AC
DWV:	1000 VAC, 60 Hz. 1 min.

### **ORDERING INFORMATION**

Number of Ports	Modifier
1 - 1 Port	0 - Standard product
Number of Positions	Panel Stop Options
6 - 6 Positions	1 - Without panel stop
8 - 8 Positions	2 - With panel stop (must have for shi
Number of Contacts	Contact Plating
4 - 4 Contacts	1 - 6μ″ gold plating
6 - 6 Contacts	2 - 15µ" gold plating
8 - 8 Contacts	3 - 30µ" gold plating
Shield Options	4 - 50μ″ gold plating
0 - No shield	
2 - Through-hole shield	

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## **Single Port**





H

**FRONT VIEW** 

**SIDE VIEW** 

.120 [3.05]

.322 [8.18]

**RECOMMENDED PCB LAYOUT** 

-.613 [15.57]

.082 [2.07]

.450 [11.43] <del>-</del>

LOCATE HOLES ⊕ Ø.005[0.13]

ARE BASIC

POSITION DIMENSIONS

÷

ł

.120 [3.05]

ø.062±.002

[ø1.57±0.05]

HOLES 2 REQ'D

.004 [0.10]

RJE15

TAB DOWN, SINGLE PORT, LOW PROFILE

### TAB DOWN, SINGLE PORT, LOW PROFILE

The RJE15 low profile connector is built to meet your high volume RJ requirements. This is a true pick and place compatible SMT connector and is available with or without shielding, as well as with a variety of options including number of contacts, plating thickness, and color. This connector is built with high temperature engineering thermoplastic and suitable for IR Reflow solder process.

### **SPECIFICATIONS**

Material	
Insulator:	High temp. thermoplastic; Complies with UL 94V-0; Black
Contacts:	Phosphor bronze hard temper with gold thickness options ( $6\mu$ ", $15\mu$ ", $30\mu$ ", $50\mu$ ") over $50\mu$ " min. nickel on contact mating area; $100\mu$ " min. matte tin plating or gold flash on tail area
Shield:	Copper alloy; nickel plating overall

Mechanical	
Insertion Force:	5 lbs max.
Pull Retention Force:	20 lbs min.
Durability:	750 mating & unmating cycles
Recommended Soldering Temperature:	Wave soldering at 260°C for 6 to 8 secs max
<b>Operating Temperature:</b>	- 40°C to + 70°C

Electrical	
<b>Contact Resistance:</b>	25 mΩ max.
Insulation resistance:	1000 $M\Omega$ min. at 500V DC for 2 mins max.
Current Rating:	1.5 Amps per contact
Voltage Rating:	125 Volts AC
DWV:	1000 VAC, 60 Hz. 1 min.

### **ORDERING INFORMATION**



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# RJE15 TAB DOWN, SINGLE PORT, LOW PROFILE

# Single Port

RJE15-1AA-0X10



#### Shielded

RJE15-1AA-1X10



#### Notes

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### **TAB DOWN, RJ45**

The RJE56 series is designed for applications where soldering is not an option. The press fit contacts and shield tabs have the "eye of the needle" design and provide good PCB retention as well as reliable electrical performance.

### **SPECIFICATIONS**

**Material** 

**DWV:** 

Insulator:	PBT mat	terial; complies with UL 940-0; Black	
Contacts:	options contact	Phosphor bronze hard temper with gold thickness options ( $6\mu$ ", $15\mu$ ", $30\mu$ ", $50\mu$ ") over $50\mu$ " min. nickel on contact mating area; $100\mu$ " min. matte tin plating on press fit tail	
Shield:	Stainles	s steel	
Electrical			
Contact Resis	tance:	20 mΩ max.	
Insulation res	sistance:	500 $M\Omega$ min. at 500V DC for 2 mins max.	
<b>Current Ratin</b>	g:	1.5 Amps per contact	
Voltage Rating:		125 Volts AC	

1000 VAC, 60 Hz. 1 min.

Mechanical	
Insertion Force:	5 lbs max.
Pull Retention Force:	20 lbs min.
Durability:	750 mating & unmating cycles
Recommended Soldering Temperature:	Wave soldering peaked at 260°C for 5 to 8 secs max
<b>Operating Temperature:</b>	- 55°C to + 85°C
Note: Suitable for IR Reflow	

### **ORDERING INFORMATION**

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#### PRESS FIT

RJE56 PRESS FIT, TAB DOWN, RJ45

PRESS FIT



### **Single Port**

RJE56-188-1X10



**Notes** 



### **SINGLE PORT, SLIM PROFILE**

RJE06 series is a group of products within a family of standard modular jacks designed to meet requirements for a variety of applications. Options within the RJE06 family include shielded & non-shielded, and 8P8C configurations.

# **SPECIFICATIONS**

Material			Mechanical
Insulator:	5	ing theromplastic;	Insertion Force:
-	•	s with UL 94V-0; Black	<b>Pull Retention F</b>
options on cont		r bronze hard temper with gold thickness 6μ", 15μ", 30μ", 50μ") over 50μ" min. nickel	Durability:
		ct mating area; 100µ" min. matte tin or gold ing on tail area	Recommended Soldering Temp
Shield:	Copper a	lloy; nickel plating overall	<b>Operating Temp</b>
			UL File #:
Electrical			Note: Connectors
Contact Resist	tance:	20 mΩ max.	-
Insulation res	istance:	500 $M\Omega$ min. at 500V DC for 2 mins max.	
<b>Current Rating</b>	g:	1.5 Amps per contact	

125 Volts AC

1000 VAC, 60 Hz. 1 min.

		-
T		
	-	5
	K	
	-	
-		

Meenamean	
Insertion Force:	5 lbs max.
Pull Retention Force:	20 lbs min.
Durability:	750 mating & unmating cycles
Recommended Soldering Temperature:	Wave soldering peaked at 260°C for 5 secs max.
<b>Operating Temperature:</b>	-40°C to + 70°C
UL File #:	E136228

Note: Connectors with high temp. material are suitable for IR Reflow

### **ORDERING INFORMATION**

**Voltage Rating:** 

DWV:



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RJE06-188-0X10



#### Single Port Non-Shielded



-.128 [3.25]

.127 [3.24]

**FRONT VIEW** 

-.606 [15.40]---

500

[12.70]

**Non-Shielded** 

**SIDE VIEW** 

.630 [16.00]

#### RJE06-166-0X10



**RECOMMENDED PCB LAYOUT** 

FRONT VIEW

SIDE VIEW

Е

÷

#### **Standard Shield**



642±.015 [16.30±0.38] .521±.015 [13.23±0.38] .142 [3.61]

#### RECOMMENDED PCB LAYOUT

#### RJE06-188-1X10



**FRONT VIEW** 

**SIDE VIEW** 

**RECOMMENDED PCB LAYOUT** 

RJE08

SINGLE AND DUAL PORT, STANDARD PROFILE

### SINGLE AND DUAL PORT, STANDARD PROFILE

RJE08 series is a group of products within a family of standard modular jacks designed to meet requirements for a variety of applications. Options within the RJE08 include with and without panel stops, and RJ11 & RJ45 configurations.

### **SPECIFICATIONS**

Material	
Insulator:	Engineering theromplastic; Complies with UL 94V-0; Black
Contacts:	Phosphor bronze hard temper with gold thickness options ( $6\mu$ ", $15\mu$ ", $30\mu$ ", $50\mu$ ") over $50\mu$ " min. nickel on contact mating area; $100\mu$ " min. matte tin or gold flash plating on tail area
Electrical	
Contact Posis	tanco: 20  mO may

Mechanical	
Insertion Force:	5 lbs max.
Pull Retention Force:	20 lbs min.
Durability:	750 mating & unmating cycles
Recommended Soldering Temperature:	Wave soldering peaked at 260°C for 5 seconds max.
<b>Operating Temperature:</b>	-40°C to + 70°C
UL File #:	E136228

Electrical	
<b>Contact Resistance:</b>	20 mΩ max.
Insulation resistance:	500 $M\Omega$ min. at 500V DC for 2 mins max.
Current Rating:	1.5 Amps per contact
Voltage Rating:	125 Volts AC
DWV:	1000 VAC, 60 Hz. 1 min.

### **ORDERING INFORMATION**



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# **RJE08** SINGLE AND DUAL PORT, STANDARD PROFILE

#### RJE08-188-0X10

RJE08-288-0X19





**RECOMMENDED PCB LAYOUT** 

#### Dual Port Non-Shielded

**TOP VIEW** 

#### -16.20 [0.638] 27.90 [1.098] -5.45 [0.215] [0.591] 15.00 8.89 [0.350] J J8 J١ -3.20 [0.126] **SIDE VIEW TOP VIEW** -23.80 [0.937]--13.97 [0.550] 2-ø3.25 [ø0.128] 8.89 [0.350] φ ⊕" е **d** d<sup>2</sup> **6** 6 16-ø0.89 [ø0.035] -1.27 [0.050] -8.89 [0.350] -22.86 [0.900]-LOCATE HOLES

**SIDE VIEW** 



**BOTTOM VIEW** 

2.54 [0.100]

**RECOMMENDED PCB LAYOUT** 

ARE BASIC



### **SINGLE PORT, STANDARD PROFILE**

The RJE74 series, with superior EMI shielding, is built to fit your RJ requirements. The vertical 10P10C version is available with an RMK4 key interface to prevent 8P8C plug from entering and damaging the connector. Includes optional Mylar cover for automated assembly equpiment.

### **SPECIFICATIONS**

**Electrical** 

**Contact Resistance:** 

Material	
Insulator:	High temp. theromplastic; Complies with UL 94V-0; Black
Contacts:	Phosphor bronze hard temper with 30µ" min. gold thickness over 50µ" min. nickel on contact mating area; 100µ" min. matte tin plating on soldering tail
Shield:	Stainless steel; pure tin dipped tail

Mechanical	
Insertion Force:	5 lbs max.
Pull Retention Force:	20 lbs min.
Durability:	750 mating & unmating cycles
Recommended Soldering Temperature:	Peaked at 260°C for 5 secs max.
<b>Operating Temperature:</b>	-55°C to + 85°C
UL File Number:	E135615
Note: Suitable for IR Reflow	

Insulation resistance:	500 $M\Omega$ min. at 500V DC for 2 mins max.
Current Rating:	1.5 Amps per contact
Voltage Rating:	125 Volts AC
DWV:	1000 VAC, 60 Hz. 1 min.

 $20 \text{ m}\Omega \text{ max}.$ 

### **ORDERING INFORMATION**

Number of Ports		Packaging
1 -1 Port		Blank - PBT, tray, without Mylar
		A - High temp housing, tray, without Mylar
Number of Positions		H - High temp housing, tape & reel with Myla
8 - 8 Positions		
A - 10 Positions		Modifier
Number of Contacts		0 - Standard product
		1 - With RMK4 keying
8 - 8 Contacts A - 10 Contacts		Panel Stop Options
Shield Options		1 - No panel stop
0 - No shield		Contact Plating
1 - Full shield	L	1 - 6μ" gold plating
		2 - 15µ" gold plating
		3 - 30µ″ gold plating

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# **R.IF74** SINGLE PORT, STANDARD PROFILE

#### **RJE74-1AA-0X10**





#### **Non-Shielded with Keying**

610

[15.50]







**RECOMMENDED PCB LAYOUT** 

#### **Shielded with Keying**

.638 16.20



**FRONT VIEW** 

.644 [16.35] TIN DIPPED ZONE .267 [6.78] .125 [3.18] .155 [3.94]

**SIDE VIEW** 

#### RJE74-1AA-1X11



#### **RECOMMENDED PCB LAYOUT**

**FRONT VIEW SIDE VIEW** ⊷.657 [16.7] .125 [3.18] **RJE88** 

SINGLE PORT, LOW PROFILE, WITH LEDs

#### SINGLE PORT, LOW PROFILE, WITH LEDs

Vertical through-hole (THT) in single port RJ45 configurations with full shield or superior EMI protection. A variety of LED options for link activity and network verification are available. Made with high temperature composite and when accompanied with our high temperature resistant LEDs, these connectors are well suited for the IR Reflow process.

### **SPECIFICATIONS**

Material			Electrical	
Insulator:	Complies with UL 94V-0; Black		<b>Contact Resistance:</b>	20 mΩ max.
			Insulation resistance:	500 M $\Omega$ min. at 500V DC for 2 mins max.
<b>Contacts:</b> Phosphor bronze hard temper with gold thickness options ( $6\mu$ ", $15\mu$ ", $30\mu$ ", $50\mu$ ") over $50\mu$ " min. nickel on		Current Rating:	1.5 Amps per contact	
		ting area; $100\mu''$ min. matte tin plating on	Voltage Rating:	125 Volts AC
	soldering ta		DWV:	1000 VAC, 60 Hz. 1 min.
Shield:	Shield:       Stainless steel; pure tin dipped tail         LED:       Tin plating on LED tails		LED Forward DC	20mA typical
.ED:			Current:	
Mechanica	al		LED Forward Voltage:	1.9 Volts max. at 2mA (for single colours) 2.6 Volts max. at 2mA (for bicolours)
Insertion For	ce:	5 lbs max.	LED Reverse Voltage:	5 Volts min.
Pull Retentio	n Force:	20 lbs min.	LED Light Intensity:	0.4 to 1.5 mcd min. at 2mA (for single colours)
Durability:		750 mating & unmating cycles		0.5 mcd min. at 2mA (for bicolours)
Recommendo Soldering Tei		Wave soldering peaked at 260°C for 5 secs max.	LED Wave Length:	Yellow: $587 \pm 7$ nm measured at 20mA Green: $565 \pm 6$ nm measured at 20mA
<b>Operating Te</b>	mperature:	-55°C to + 85°C		Red: 625 $\pm$ 5 nm measured at 20mAw
Note: Connect	ors without LEL	Ds are suitable for IR Reflow		

### **ORDERING INFORMATION**



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# **RJE88** SINGLE PORT, LOW PROFILE, WITH LEDS





#### Notes



### **PORT, NARROW PROFILE**

Multiple position and contact options, single port, vertical connector with no shield or LED options. Made with high temperature thermoplastic this series is suitable for the IR Reflow process. This series is ideal for high volume cost sensitive programs.

### **SPECIFICATIONS**

Material	
Insulator:	High temp. theromplastic; Complies with UL 94V-0; Black
Contacts:	Phosphor bronze hard temper with gold thickness options (6μ", 15μ", 30μ", 50μ") over 50μ" min. nickel on contact mating area; 100μ" min. matte tin plating on tail

Mechanical	
Insertion Force:	5 lbs max.
Pull Retention Force:	20 lbs min.
Durability:	750 mating & unmating cycles
Recommended Soldering Temperature:	Wave soldering peaked at 260°C for 5 secs max.
<b>Operating Temperature:</b>	-55°C to + 85°C
UL File Number:	E135615
Note: Suitable for IR Reflow	

Electrical	
<b>Contact Resistance:</b>	20 mΩ max.
Insulation resistance:	500 $M\Omega$ min. at 500V DC for 2 mins max.
Current Rating:	1.5 Amps per contact
Voltage Rating:	125 Volts AC
DWV:	1000 VAC, 60 Hz. 1 min.

# ORDERING INFORMATION



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60

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THROUGH - HOLE



#### RJE1J-188-0X10

### Single Port Non-Shielded



**Non-Shielded** 

RJE1J-144-0X10





### **SINGLE PORT, SURFACE MOUNT**

The RJE23 series is designed for high volume production where a vertical modular jack is required. Shielding provides increased EMI performance. Surface mount contacts and hold-down nail bracket assist in speeding up the production process.

### **SPECIFICATIONS**

Material	
Insulator:	High temp. theromplastic; Complies with UL 94V-0; Black
Contacts:	Phosphor bronze hard temper with gold thickness options ( $6\mu$ ", $15\mu$ ", $30\mu$ ", $50\mu$ ") over $50\mu$ " min. nickel on contact mating area; $100\mu$ " min. matte tin plating over nickel on soldering tail
Shield:	Copper alloy; matte tin plating
Hold Down:	Copper alloy; matte tin plating
Coplanarity:	0.004" max. gap between all terminal tails

#### **Mechanical**

Insertion Force:	5 lbs max.		
Pull Retention Force:	20 lbs min.		
Durability:	750 mating & unmating cycles		
<b>Operating Temperature:</b>	-55°C to + 85°C		
UL File Number:	E135615		
Note: Connector is suitable for IR Reflow			

#### **Electrical**

Contact Resistance:	20 mΩ max.
Insulation resistance:	500 $M\Omega$ min. at 500V DC for 2 mins max.
Current Rating:	1.5 Amps per contact
Voltage Rating:	125 Volts AC
DWV:	1000 VAC, 60 Hz. 1 min.

### **ORDERING INFORMATION**

Didn't find what you were looking for?

Number of Ports		Packaging
1 -1 Port		Blank - Tray
Number of Positions		T - Tape & Reel
4 - 4 Positions		Modifier
6 - 6 Positions		3 - Standard with solderplate & mylar tape
8 - 8 Positions		4 - Standard with solderplate
		6 - Standard with solderplate inward
Number of Contacts		Housing/Panel Stop Options
4 - 4 Contacts		1 - Black housing without panel stop
6 - 6 Contacts		
8 - 8 Contacts		2 - Black housing with panel stop
Shield Options		Contact Plating
0 - No shield		1 - 6µ″ gold plating
2 - Shield with no tabs		2 - 15µ" gold plating
3 - Shield with side tabs		3 - 30μ″ gold plating
5 Shick With Side (ub)		4 - 50µ" gold plating

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#### RJE23-188-3X16

#### **Single Port** Shielded







**BOTTOM VIEW** 



**RECOMMENDED PCB LAYOUT** 

#### RJE23-188-0X13



**SIDE VIEW** 

**RECOMMENDED PCB LAYOUT** 

**Non-Shielded** 



### **VERTICAL, 2X4 PORT**

RJ45, vertical, multi-port connector in a 2x4 port configuration. Standard height profile available in both shielded and unshielded versions. Can be designed into various networking devices that require multiple ports and limited space.

### **SPECIFICATIONS**

Material	
Insulator:	Engineering thermoplastic, complies with UL94V-0, Black colour
Contacts:	Phosphor bronze hard temper with gold thickness options ( $6\mu$ ", $15\mu$ ", $30\mu$ ", $50\mu$ ") over $50\mu$ " min. nickel on contact mating area; $100\mu$ " minimum Nickel on contact mating area Gold flash on soldering tails
Shield:	Copper alloy with Nickel plating underplated

Mechanical	
Insertion Force:	5 lbs max.
Pull Retention Force:	20 lbs min.
Durability:	750 mating & unmating cycles
Operating Temperature:	-55°C to + 85°C
Soldering Temperature:	Wave soldering peaked at 260°C for 5 seconds maximum

Electrical	
<b>Contact Resistance:</b>	20 mΩ max.
Insulation resistance:	500 $M\Omega$ min. at 500V DC for 2 mins max.
Current Rating:	1.5 Amps per contact
Voltage Rating:	125 Volts AC
DWV:	1000 VAC, 60 Hz. 1 min.

### **ORDERING INFORMATION**



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#### RJE4N-888-1X01

3.25

11.29

3.40

### **Eight Ports**

#### Shielded



FRONT VIEW



**BOTTOM VIEW** 



**RECOMMENDED PCB LAYOUT** 

4.00

16.30

**SIDE VIEW** 

27.00

**Notes** 

#### STACKED



### **RJ45 OVER USB**

RJ 45 over USB 2.0 type. A unique series that combines two different types of connectors: RJ45 and USB connectors. Configurations include RJ45 over a single USB and RJ45 over two USBs. The RJ is available with or without LEDs for link activity and network verification. Full shield for superior EMI protection with EMI tabs options.

### **SPECIFICATIONS**

Material			
Insulator:	5	ng thermoplastic; with UL 94V-0; Black	
Contacts:	options (6 on contac	Phosphor bronze hard temper with gold thickness options ( $6\mu$ ", $15\mu$ ", $30\mu$ ", $50\mu$ ") over $50\mu$ " min. nickel on contact mating area; $100\mu$ " min. matte tin plating on soldering tail	
Shield:	Copper al	loy plated with Nickel	
LED:	Tin plating	g on LED tails	
Mechani	cal		
Insertion Fo	orce:	5 lbs max.	
Pull Retenti	on Force:	20 lbs min.	
Durability:		750 mating & unmating cycles	
Recommen Soldering T	ded emperature:	Wave soldering peaked at 260°C for 5 secs max.	
Operating T	Temperature:	-20°C to + 85°C	
UL File #:		E136228	

Electrical	
<b>Contact Resistance:</b>	20 mΩ max.
Insulation resistance:	500 $M\Omega$ min. at 500V DC for 2 mins max.
Current Rating:	1.5 Amps per contact
Voltage Rating:	125 Volts AC
DWV:	Contact to contact: 1000 VAC, 60 Hz. 1 min.
LED Forward DC Current:	20mA typical
LED Forward Voltage:	1.6 -2.4 Volts max. at 2mA (for single colours)
LED Reverse Voltage:	5 Volts min.
LED Light Intensity:	2 to 12 mcd min. at 20mA (for single colours)
LED Wave Length:	Yellow: 590 $\pm$ 5 nm measured at 20mA Green: 570 $\pm$ 5 nm measured at 20mA Red: 650 $\pm$ 15 nm measured at 20mA

### **ORDERING INFORMATION**







RJE36-188-2X03

## **Single Port**







**RECOMMENDED PCB LAYOUT** 

**FRONT VIEW** 

### Dual Port Shielded with LEDs









#### **RECOMMENDED PCB LAYOUT**

#### FRONT VIEW

SIDE VIEW

RJSAE

#### 2.4 AND 8 PORTS WITH LED AND SHIELD OPTIONS

### 2, 4 AND 8 PORTS WITH LED AND SHIELD OPTIONS

The RJSAE is a RJ45 stackable connector that reduces component and labor costs by incorporating LEDs. Its stackable feature enables more ports with the same board space. With superior EMI performance, the option of configuring your connector with a ferrite filter is available to further reduce crosstalk in noisy applications.

### **SPECIFICATIONS**

Material		
Insulator:	High temp. thermoplastic; Complies with UL 94V-0; Black	
Contacts:	Phosphor bronze hard temper with gold thickness options ( $6\mu$ ", $15\mu$ ", $30\mu$ ", $50\mu$ ") over $50\mu$ " min. nickel on contact mating area; $100\mu$ " min. matte tin plating on tail	
Shield:	Copper alloy; nickel plated or stainless steel with tin dripped tail (as specified in drawing)	
LED:	Tin plating on LED tail	
Mechanical		
Insertion Ford	e:	5 lbs max.
Pull Retention	n Force:	20 lbs min.
Durability:		750 mating & unmating cycles
Recommende Soldering Ten		Wave soldering peaked at 260°C for 5 secs max.
<b>Operating Ter</b>	nperature:	-55°C to + 85°C
UL File #:		E135615
CSA File #:		150190
Note: Connectors without LEDs are suitable for IB Beflow:		

#### **Electrical**

<b>Contact Resistance:</b>	20 mΩ max.
Insulation resistance:	500 $M\Omega$ min. at 500V DC for 2 mins max.
Current Rating:	1.5 Amps per contact
Voltage Rating:	125 Volts AC
DWV:	Contact to contact: 1000 VAC, 60 Hz. 1 min.
LED Forward DC Current:	20mA typical
LED Forward Voltage:	1.9 Volts max. at 2mA (for single colours) 2.6 Volts max. at 2mA (for bicolours)
LED Reverse Voltage:	5 Volts min.
LED Light Intensity:	0.4 to 1.5 mcd min. at 2mA (for single colours) 0.5 mcd min. at 2mA (for bicolours)
LED Wave Length:	Yellow: 587 $\pm$ 7 nm measured at 20mA Green: 565 $\pm$ 6 nm measured at 20mA Red: 625 $\pm$ 5 nm measured at 20mA

Note: Connectors without LEDs are suitable for IR Reflow; Connectors with Reflow LEDs available

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RJSAE

2, 4 AND 8 PORTS WITH LED AND SHIELD OPTIONS

#### **RJSAE-508X-02**



**SIDE VIEW** 

#### Shielded



# **Multi Port**

#### **Non-Shielded**



#### **RJSAE-508X-08**





#### **Multi Port Non-Shielded**

**RJSAE-508X-08** 



#### **RJSAE-538X-08**



STACKED

RJSNE

**4 OVER 4 PORTS WITH LED AND SHIELD OPTIONS** 

### **4 OVER 4 PORTS WITH LED AND SHIELD OPTIONS**

The RJSNE series is a stacked connector that offers LED options for link activity and network verification. It is available with or without shielding. The RJSNE series also includes a unique inner shield device to reduce the crosstalk between top and bottom ports.

### **SPECIFICATIONS**

Material	
Insulator:	Engineering thermoplastic; Complies with UL 94V-0; Black
Contacts:	Phosphor bronze hard temper with gold thickness options ( $6\mu$ ", $15\mu$ ", $30\mu$ ", $50\mu$ ") over $50\mu$ " min. nickel on contact mating area; $100\mu$ " min. matte tin plating on tail
Shield:	Copper alloy; nickel plated or stainless steel with tin dipped tail
LED:	Pure tin plating on LED tail

Mechanical	
Insertion Force:	5 lbs max.
Pull Retention Force:	20 lbs min.
Durability:	750 mating & unmating cycles
Recommended Soldering Temperature:	Wave soldering peaked at 260°C for 5 secs max.
<b>Operating Temperature:</b>	-40°C to + 85°C
UL File #:	E135615
CSA File #:	150190

Electrical	
<b>Contact Resistance:</b>	20 mΩ max.
Insulation resistance:	500 $M\Omega$ min. at 500V DC for 2 mins max.
Current Rating:	1.5 Amps per contact
Voltage Rating:	125 Volts AC
DWV:	1000 VAC, 60 Hz. 1 min.
LED Forward DC Current:	20mA typical
LED Forward Voltage:	1.9 Volts max. at 2mA (for single colours) 2.6 Volts max. at 20mA (for bicolours)
LED Reverse Voltage:	5 Volts min.
LED Light Intensity:	0.4 to 1.5 mcd min. at 2mA (for single colours) 0.5 mcd min. at 2mA (for bicolours)
LED Wave Length:	Yellow: 587 $\pm$ 7 nm measured at 20mA Green: 565 $\pm$ 6 nm measured at 20mA Red: 625 $\pm$ 5 nm measured at 20mA

### **ORDERING INFORMATION**



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# **Single Port**

#### **RJSNE-538X-X8**



Notes

72

CAT 5e

**RJE48** CAT 5e, RIGHT ANGLE, LOW PROFILE, WITH LEDS

# **RIGHT ANGLED, LOW PROFILE, WITH LEDs**

The RJE48 series of modular jacks meet CAT 5e performance per EIA-568-C.2. It supports Gigabit Ethernet Protocols. Shielding is available for increased EMI performance and LEDs for link activity and network verification.

# **SPECIFICATIONS**

Material	
Insulator:	High temp. thermoplastic; Complies with UL 94V-0; Black
Contacts:	Phosphor bronze hard temper with gold thickness options ( $6\mu$ ", $15\mu$ ", $30\mu$ ", $50\mu$ ") over $50\mu$ " min. nickel on contact mating area; $100\mu$ " min. matte tin plating on solder tails
Shield:	Stainless steel with tin dipped tails
LED:	Tin plating on LED tail

Mechanical	
Insertion Force:	5 lbs max.
Pull Retention Force:	20 lbs min.
Durability:	750 mating & unmating cycles
Recommended Soldering Temperature:	Wave soldering peaked at 260°C for 5 secs max.
<b>Operating Temperature:</b>	-55°C to + 85°C
UL File Number:	E135615

Electrical	
<b>Contact Resistance:</b>	20 mΩ max.
Insulation resistance:	500 $M\Omega$ min. at 500V DC for 2 mins max.
Current Rating:	1.25 Amps per contact
Voltage Rating:	125 Volts AC
DWV:	1000 VAC, 60 Hz. 1 min.
LED Forward DC Current:	20mA typical
LED Forward Voltage:	1.9 Volts max. at 2mA (for single colours) 2.6 Volts max. at 20mA (for bicolours)
LED Reverse Voltage:	5 Volts min.
LED Light Intensity:	0.4 to 1.5 mcd min. at 2mA (for single colours) 0.5 mcd min. at 2mA (for bicolours)
LED Wave Length:	Yellow: 587 $\pm$ 7 nm measured at 20mA Green: 565 $\pm$ 6 nm measured at 20mA Red: 625 $\pm$ 5 nm measured at 20mA

# **ORDERING INFORMATION**



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CAT 5e

RJE48 CAT 5e, RIGHT ANGLE, LOW PROFILE, WITH LEDS

# **Single Port**

RJE48-188-1XX1

RJE48-488-1XX1



**Multi Port** 

Shielded .563 [14.3] \* 3 = 1.69 [42.9] -.815 [20.70] .039 LED 2 (LEFT) LED 1 [1.00] (RIGHT) Þ E 470 Amphenol Amphenol B [11.95] .118 [3.00] .472 [11.98] 2.28 [57.80] .592 [15.05]-TIN DIPPING **FRONT VIEW SIDE VIEW** ø.044±.002 [ø1.12±0.05] .153 [3.88] .563 [14.3] \* 3 2.31 [58.80] HOLES 16 REQ'D .090 [2.29] TYP. = 1.69 [42.90] ø.035±.002 .090 [2.29] TYP. 153 [3.88] [ø0.90±0.05] HOLĖS 32 REQ'D ŧ. ⊕<sup>32</sup> 30 28 26 ⊕ ⊕ ⊕ ⊕ ₿' 42 40 38 ቆ - .292 **₩₩₩₩ ΦΦΦΦ** 31 29 27 25 ∲ 6 13 **⊕ ⊕ ⊕ ⊕** 43 41 39 37 [7.42] Amphenol .121 [3.07] --1.13 [28.60] .218 [5.42] RIRIRI .102 [2.60] ø.098±.002 .199 [5.05] .513 [13.04] [ø2.50±0.05] .575 [14.60] HOLES 2 REQ'D .129 [3.27] .040 [1.02] \* 7 = 0.281 [7.14] 2.29 [58.10] -.039 [1.00] - 2.28 [57.80] -**TOP VIEW RECOMMENDED PCB LAYOUT** 

CAT 5e, RIGHT ANGLE, STANDARD PROFILE, WITH LEDs

# **RIGHT ANGLED, STANDARD PROFILE, WITH LEDs**

The RJE58 series of modular jacks meet CAT 5e performance per EIA-568-C.2. It supports Gigabit Ethernet Protocols. Shielding is available for increased EMI performance and LEDs for link activity and network speed verification.

# **SPECIFICATIONS**

Material		Electrical	
Insulator:	High temp. thermoplastic;	<b>Contact Resistance:</b>	20 mΩ max.
	Complies with UL 94V-0; Black	Insulation resistance:	500 M $\Omega$ min. at 500V DC for 2 mins max.
Contacts:	Phosphor bronze hard temper with gold thickness options (6µ", 15µ", 30µ", 50µ") over 50µ" min. nickel	Current Rating:	1.25 Amps per contact
	on contact mating area; $100\mu^{\prime\prime}$ min. matte tin plating	Voltage Rating:	125 Volts AC
	on solder tails	DWV:	1000 VAC, 60 Hz. 1 min.
Shield:	Stainless steel with tin dipped tails	LED Forward DC	20mA typical
LED:	Tin plating on LED tail	Current:	
		LED Forward Voltage:	1.9 Volts max. at 2mA (for single colours) 2.6 Volts max. at 20mA (for bicolours)
Mechanica		LED Reverse Voltage:	5 Volts min.

Mechanical	
Insertion Force:	5 lbs max.
Pull Retention Force:	20 lbs min.
Durability:	750 mating & unmating cycles
Recommended Soldering Temperature:	Wave soldering peaked at 260°C for 10 secs. max, for one cycle with an LED defect rate of no more than 100 ppm
<b>Operating Temperature:</b>	-55°C to + 85°C
UL File Number:	E135615

Current Rating:	1.25 Amps per contact
Voltage Rating:	125 Volts AC
DWV:	1000 VAC, 60 Hz. 1 min.
LED Forward DC Current:	20mA typical
LED Forward Voltage:	1.9 Volts max. at 2mA (for single colours) 2.6 Volts max. at 20mA (for bicolours)
LED Reverse Voltage:	5 Volts min.
LED Light Intensity:	0.4 to 1.5 mcd min. at 2mA (for single colours) 0.5 mcd min. at 2mA (for bicolours)
LED Wave Length:	Yellow: 587 $\pm$ 7 nm measured at 20mA Green: 565 $\pm$ 6 nm measured at 20mA Red: 625 $\pm$ 5 nm measured at 20mA

# **ORDERING INFORMATION**



# **RJE58** CAT 5e, RIGHT ANGLE, STANDARD PROFILE, WITH LEDS

# **Single Port**

RJE58-188-3XX1



#### **Shielded - Option 5**



**FRONT VIEW** 





**TOP VIEW** 

#### **RECOMMENDED PCB LAYOUT**

RJE58-188-5XX1

CAT 5e, RIGHT ANGLE, STANDARD PROFILE, WITH LEDS

### RJE58-188-6XX1



Notes

CAT 5e, RIGHT ANGLE, RECESSED, LOW PROFILE WITH LEDS

# **RIGHT ANGLE, RECESSED, LOW PROFILE WITH LEDs**

The RJE72 series of modular jacks meet CAT 5e performance per EIA-568-C.2. It supports Gigabit Ethernet Protocols. Shielding available for increased EMI performance and LEDs for link activity and network speed verification.

# **SPECIFICATIONS**

Material			Electrical	
Insulator:	<b>.</b> .	. thermoplastic;	<b>Contact Resistance:</b>	20 mΩ max.
	Complies v	vith UL 94V-0; Black	Insulation resistances	= 500 MΩ min. at 500V DC for 2 mins matrix
Contacts:	•	bronze hard temper with gold thickness u", 15µ", 30µ", 50µ") over 50µ" min. nickel on	Current Rating:	1.25 Amps per contact
		ating area; $100\mu^{\prime\prime}$ min. matte tin plating on	Voltage Rating:	125 Volts AC
	solder tails		DWV:	1000 VAC, 60 Hz. 1 min.
Shield:	Stainless st	teel with tin dipped tails	LED Forward DC	20mA typical
LED:	Tin plating	on LED tail	Current:	
			LED Forward Voltage	: 1.9 Volts max. at 2mA (for single colou 2.6 Volts max. at 20mA (for bicolours)
Mechanic			LED Reverse Voltage:	5 Volts min.
Insertion For	rce:	5 lbs max.	LED Light Intensity:	0.4 to 1.5 mcd min. at 2mA (for single
Pull Retentio	on Force:	20 lbs min.		colours)

r un netention r orte.	2010311111.
Durability:	750 mating & unmating cycles
Recommended Soldering Temperature:	Wave soldering peaked at 260°C for 5 secs max.
<b>Operating Temperature:</b>	-55°C to + 85°C
UL file #:	E135615

Insulation resistance:	$500~\text{M}\Omega$ min. at 500V DC for 2 mins max.
Current Rating:	1.25 Amps per contact
Voltage Rating:	125 Volts AC
DWV:	1000 VAC, 60 Hz. 1 min.
LED Forward DC Current:	20mA typical
LED Forward Voltage:	1.9 Volts max. at 2mA (for single colours) 2.6 Volts max. at 20mA (for bicolours)
LED Reverse Voltage:	5 Volts min.
LED Light Intensity:	0.4 to 1.5 mcd min. at 2mA (for single colours) 0.5 mcd min. at 2mA (for bicolours)
LED Wave Length:	Yellow: $587 \pm 7$ nm measured at 20mA Green: $565 \pm 6$ nm measured at 20mA

Red: 625 ± 5 nm measured at 20mA

Note: IR Reflow compatible; Consult factory for details

## **ORDERING INFORMATION**

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CAT 5e, RIGHT ANGLE, RECESSED, LOW PROFILE WITH LEDs

### RJE72-188-14X1



# **Multi Port**

Γ

2.29 [58.1]

**TOP VIEW** 

#### Shielded .815 [20.70] .563 [14.3] \* 3 = 1.69 [42.9] -.038 [0.97] LED 2 (LEFT) LED 1 (RIGHT) Щ .3่33 DIM A±0.20 [DIM A±.008] TAIL LENGTH FOR .470 [8.47] j Ĥ Amphenol Amphenol Amphenol [11.95] 4 aaaanna nacionada LED AND SIGNAL PIN 20 .354 [8.98] DIPPED 2.43 [61.7] ZONE .541 [13.75] **FRONT VIEW SIDE VIEW** ø.0.44±.002 [ø1.12±0.05] .563 [14.3] \* 3 .090 [2.29] TYP. HOLES 16 REQ'D = 1.69 [42.9] .247 [6.27] 2.32 [58.8] ø.035±.002 .090 [2.29] TYP. .317 [8.05] [ø0.90±0.05] HOLĖS 32 REQ'D **≬** -138 35 34 24423 224 32.30 28.26 33 4020 18.16 14 1 4 4 4 4 4 4 1 4 4 4 4 4 4 4 31 29 27.25 19.17 15.13 13.12 2 410 [10.42] V θ Amphenol .502 4 - .513 [13.0] [12.75] .040 [1.02] \* 7 = .281 [7.14] 4 .331 [8.42] R0.50 [R.020] .039 [1.00] TYP .200 .230 [5.84] 2.29 [58.1]

#### RJE72-488-14X1

.200 [5.07]

**RECOMMENDED PCB LAYOUT** 

2.32 [58.8]

2.43 [61.7]

# **Single Port**

[5.07]

.094 [2.40]

CAT 5e

# RJSGE

CAT 5e, 2 OVER 2 PORTS, PRESS FIT, WITH LEDs

# 2 OVER 2 PORTS, PRESS FIT, WITH LEDs

The RJSGE series of modular jacks meet CAT 5e performance per EIA-568-C.2. It supports Gigabit Ethernet Protocols. Shielding available for increased EMI performance and LEDs for Link Activity and Network Speed verification.

# **SPECIFICATIONS**

Mechanical Insertion Force:

**Durability:** 

Recommended

**UL File Number:** 

**Pull Retention Force:** 

**Soldering Temperature:** 

**Operating Temperature:** 

Insulator:Engineering thermoplastic; Complies with UL 94V-0; BlackContacts:Phosphor bronze hard temper with gold thickness options (6µ", 15µ", 30µ", 50µ") over 50µ" min. nickel on contact mating area; 100µ" min. matte tin plating on solder tailsShield:Stainless steal with press-fit tails	Material	
options (6 $\mu$ ", 15 $\mu$ ", 30 $\mu$ ", 50 $\mu$ ") over 50 $\mu$ " min. nickel on contact mating area; 100 $\mu$ " min. matte tin plating on solder tails	Insulator:	5 5 1 1
Shield: Stainless steal with press-fit tails	Contacts:	options (6 $\mu$ ", 15 $\mu$ ", 30 $\mu$ ", 50 $\mu$ ") over 50 $\mu$ " min. nickel on contact mating area; 100 $\mu$ " min. matte tin plating on
	Shield:	Stainless steal with press-fit tails
LED: Press-fit with tin plating on LED tails	LED:	Press-fit with tin plating on LED tails

5 lbs max.

20 lbs min.

secs max.

E135615

-55°C to + 85°C

750 mating & unmating cycles

Wave soldering peaked at 260°C for 5

Electrical	
<b>Contact Resistance:</b>	20 mΩ max.
Insulation resistance:	500 $M\Omega$ min. at 500V DC for 2 mins max.
<b>Current Rating:</b>	1.25 Amps per contact
Voltage Rating:	125 Volts AC
DWV:	1000 VAC, 60 Hz. 1 min.
LED Forward DC Current:	20mA typical
LED Forward Voltage:	1.9 Volts max. at 2mA (for single colours) 2.6 Volts max. at 20mA (for bicolours)
LED Reverse Voltage:	5 Volts max.
LED Light Intensity:	0.4 to 1.5 mcd min. at 2mA (for single colours) 0.5 mcd min. at 2mA (for bicolours)
LED Wave Length:	Yellow: 587 $\pm$ 7 nm measured at 20mA Green: 570 $\pm$ 5 nm measured at 20mA Red: 625 $\pm$ 5 nm measured at 20mA

Note: IR Reflow compatible; Consult factory for details

# **ORDERING INFORMATION**





RJSGE

CAT 5e, 2 OVER 2 PORTS, PRESS FIT, WITH LEDs

## Four Port Shielded - with no EMI Tabs

### **RJSGE-488-6XX1**

#### TOP LED1 33.70 [1.327] <u>33.14 [1.305]</u> <u>1.14 [0.045]</u> [001.0] 33.40 [1.315] TOP LED2 Ø0 .60 [Ø0.024](24X)-1.27X7=8.89 [0.350] 5 2.54 [0.100] ø٥ .60 [Ø0.024](32X) [0.250] [1.134] [0.098 28.9 [1.138] ø1 .05 [ø0.041](4X)ŝ 68 .3 [1.232] TI DODDODOD (C **THODODODOO** 28.80 2.50 [8.51 [0.729] 3.81 [0.150] Г 3.97 [0.550] Cl 5 F0.020 C8 Di Amphenol [0.295] 5.49 2.90 [0.114] 늃 0.50 [0.020] 2.54 [0.100] 6.35 [0.250] 2.54 [0.100] 3.83 [0.151] BOTTOM LED2 PCB FRONT EDGE ø3 [ø0.118](2X) BOTTOM LED 8.89 [0.350] 3.97 [0.550] 1.14 [0.045] 16.26 [0.640] CONNECTOR OUT 4.44 [0.175] 2.54 [0.100] 0.91 [0.430] 15.49 [0.610] 1.27 [0.050] 16.26 [0.640] 18.50 [0.728] RECOMMENDED P.C.B LAYOUT COMPONENT SIDE OF BOARD TOLERANCE: +/-0.05[.002] **RECOMMENDED PCB LAYOUT SIDE VIEW FRONT VIEW**

Measurements: mm [Inches]

**RJSGE-488-7XX1** 

### **Shielded - with EMI Tabs**



#### Measurements: mm [Inches]

RJE45 CAT 6, SINGLE PORT, LOW PROFILE, WITH LEDS

# SINGLE PORT, LOW PROFILE, WITH LEDs

The RJE45 series of modular jacks meet CAT 6 performance per EIA-568-C.2. It supports Gigabit Ethernet Protocols and 10 Gig links in applications up to 50m. Shielding available for increased EMI performance and LEDs for link activity and network speed verification.

# **SPECIFICATIONS**

Insulator: High temp. thermoplastic; Complies with UL 94V-0; Black	5 1 1 1	
options (6µ", 15µ", 30µ", 50µ") over 50µ″ min. nick	Phosphor bronze hard temper with gold thickness options ( $6\mu$ ", $15\mu$ ", $30\mu$ ", $50\mu$ ") over $50\mu$ " min. nickel on contact mating area; $100\mu$ " min. matte tin plating on solder tails	
Shield: Stainless steel with tin dipped tails	Stainless steel with tin dipped tails	
LED: Tin plating on LED tail	Tin plating on LED tail	
Mechanical		
Insertion Force: 5 lbs max.		
Pull Retention Force:20 lbs min.		
Durability:750 mating & unmating cycles		
RecommendedWave soldering peaked at 260°C for secs max. or lead free reflow solder up to 260°C for 10 secs for one cycle with an LED defect rate of no more 	ng e	
<b>Operating Temperature:</b> -55°C to + 85°C		
UL File Number: E135615		

# Electrical

Electrical	
<b>Contact Resistance:</b>	20 mΩ max.
Insulation resistance:	500 $M\Omega$ min. at 500V DC for 2 mins max.
Current Rating:	1.25 Amps per contact
Voltage Rating:	125 Volts AC
DWV:	1000 VAC, 60 Hz. 1 min.
LED Forward DC Current:	20mA typical
LED Forward Voltage:	1.9 Volts max. at 2mA
LED Reverse Voltage:	5 Volts min.
LED Light Intensity:	0.4 to 1.5 mcd min. at 2mA
LED Wave Length:	Yellow: 587 $\pm$ 7 nm measured at 20mA Green: 565 $\pm$ 6 nm measured at 20mA Red: 625 $\pm$ 5 nm measured at 20mA

Note: Multiple exposures not recommended

## **ORDERING INFORMATION**

			^	^	
Number of Ports					Packaging
1 - 1 Port					Blank - Tray
					T - Tape & Reel
Number of Positions					
8 - 8 Positions					Modifier
					1 - Standard, black housing,
Number of Contacts					0.130" contact and LED tail length
8 - 8 Contacts					2 - Black housing, with flange,
					0.130" contact and LED tail length
Shield Options					
0 - No shield					LED Options
1 - Full shield with top and bottom EMI tabs					Click to view page 3 for options
2 - Full shield without EMI tabs, back PCB tabs					Contact Plating
					Contact Plating
4 - Full shield without EMI tabs, front PCB tabs					1 - 6μ" gold plating
					2 - 15µ" gold plating
					3 - 30µ" gold plating
't find what you were looking for?					$4 - 50\mu^{\prime\prime}$ gold plating
e contact sales@amphenolcanada.com and let us know what you ne	eed	ł.			. John gold plating

RIF45 - 1 8 8 - X X X X - X



CAT 6, SINGLE PORT, LOW PROFILE, WITH LEDs

### RJE45-188-0X01









**SIDE VIEW** 



**RECOMMENDED PCB LAYOUT** 

**BACK VIEW** 

RJE45-188-1XX1

Shielded



**SIDE VIEW** 





[16.54] .110 [2.80] 450 [11.43] **BACK VIEW** 

RJE49 CAT 6, RIGHT ANGLE, LOW PROFILE, WITH LEDS

# **RIGHT ANGLE, LOW PROFILE, WITH LEDs**

The RJE49 series of modular jacks meet CAT 6 performance per EIA-568-C.2. It supports Gigabit Ethernet Protocols. Shielding is available for increased EMI performance and LEDs for link activity and network verification.

# **SPECIFICATIONS**

Material				
Insulator:		High temp. thermoplastic; Complies with UL 94V-0; Black		
Contacts:	Phosphor bronze hard temper with gold thickness options ( $6\mu$ , $15\mu$ , $30\mu$ , $50\mu$ ) over $50\mu$ min. nickel on contact mating area; $100\mu$ min. matte tin plating on solder tails			
Shield:	Stainless ste	Stainless steel with tin dipped tails		
LED:	Tin plating on LED tail			
Mechanical				
Insertion Forc	e:	5 lbs max.		
Pull Retention	Force:	20 lbs min.		
Durability:		750 mating & unmating cycles		
Recommende Soldering Tem		Wave soldering peaked at 260°C for 5 secs max.		
Operating Ten	nperature:	-55°C to + 85°C		
UL File Numbe	er:	E135615		

Electrical	
<b>Contact Resistance:</b>	20 mΩ max.
Insulation resistance:	500 $M\Omega$ min. at 500V DC for 2 mins max.
Current Rating:	1.25 Amps per contact
Voltage Rating:	125 Volts AC
DWV:	1000 VAC, 60 Hz. 1 min.
LED Forward DC Current:	20mA typical
LED Forward Voltage:	1.9 Volts max. at 2mA (for single colours) 2.6 Volts max. at 20mA (for bicolours)
LED Reverse Voltage:	5 Volts min.
LED Light Intensity:	0.4 to 1.5 mcd min. at 2mA (for single colours) 0.5 mcd min. at 2mA (for bicolours)
LED Wave Length:	Yellow: 587 $\pm$ 7 nm measured at 20mA Green: 565 $\pm$ 6 nm measured at 20mA Red: 625 $\pm$ 5 nm measured at 20mA

# **ORDERING INFORMATION**



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CAT 6

RE

CAT 6, RIGHT ANGLE, LOW PROFILE, WITH LEDs

#### RJE49-188-1XX1



**Notes** 

# RJE59 CAT 6, RIGHT ANGLE, STANDARD PROFILE, WITH LEDS

# **RIGHT ANGLE, STANDARD PROFILE, WITH LEDs**

The RJE59 series of modular jacks meet CAT 6 performance per EIA-568-C.2. It supports Gigabit Ethernet Protocols. Shielding is available for increased EMI performance and LEDs for link activity and network speed verification.

# **SPECIFICATIONS**

Material			Electrical	
Insulator:	<b>.</b> .	. thermoplastic; vith UL 94V-0; Black	Contact Resistance: Insulation resistance:	
•		oronze hard temper with gold thickness 4″, 15µ″, 30µ″, 50µ″) over 50µ″ min. nickel on	Current Rating:	
	contact ma solder tails	ating area; 100 $\mu^{\prime\prime}$ min. matte tin plating on	Voltage Rating:	
			DWV:	
Shield:	Stainless st	eel with tin dipped tails	LED Forward DC	
LED:	Tin plating	on LED tail	Current:	
			LED Forward Voltage:	
Mechanic	al			
Insertion Fo	rce:	5 lbs max.	LED Reverse Voltage:	
Pull Retentio	on Force:	20 lbs min.	LED Light Intensity:	
Durability:		750 mating & unmating cycles		
Recommend Soldering Te		Wave soldering peaked at 260°C for 10 secs max. for one cycle with an LED defect rate of no more than 100ppm	LED Wave Length:	
Operating Te	emperature:	-55°C to + 85°C		
UL File Numl	ber:	E135615		

Note: multiple exposures not recommended; IR Reflow compatible version also available; Consult factory for details

# **ORDERING INFORMATION**





500 M $\Omega$  min. at 500V DC for 2 mins max.

1.9 Volts max. at 2mA (for single colours) 2.6 Volts max. at 20mA (for bicolours)

0.4 to 1.5 mcd min. at 2mA (for single

0.5 mcd min. at 2mA (for bicolours) Yellow:  $587 \pm 7$  nm measured at 20mA Green:  $565 \pm 6$  nm measured at 20mA Red:  $625 \pm 5$  nm measured at 20mA

 $20 \text{ m}\Omega \text{ max}.$ 

125 Volts AC

20mA typical

5 Volts min.

colours)

1.25 Amps per contact

1000 VAC, 60 Hz. 1 min.

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CAT 6, RIGHT ANGLE, STANDARD PROFILE, WITH LEDS

### RJE59-188-3XX1



RJE59-188-5XX1



# **Single Port**

**Shielded - Option 3** 

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CAT 6



# **Single Port**

RJE59-188-6XX1



Notes

RJE7' CAT 6, RIGHT ANGLE, RECESSED, LOW PROFILE, WITH LEDs

# **RIGHT ANGLED, RECESSED, LOW PROFILE, WITH LEDs**

The RJE71 series of modular jacks meet CAT 6 performance per EIA-568-C.2. It supports Gigabit Ethernet Protocols. Shielding available for increased EMI performance and LEDs for link activity and network speed verification.

# **SPECIFICATIONS**

Material				
Insulator:		High temp. thermoplastic; Complies with UL 94V-0; Black		
Contacts:	options (6µ	Phosphor bronze hard temper with gold thickness options ( $6\mu$ , $15\mu$ , $30\mu$ , $50\mu$ ) over $50\mu$ min. nickel on contact mating area; $100\mu$ min. matte tin plating on solder tails		
Shield:	Stainless ste	Stainless steel with tin dipped tails		
LED:	Tin plating	Tin plating on LED tail		
Mechanical				
Insertion Force:		5 lbs max.		
Pull Retentio	n Force:	20 lbs min.		
Durability:		750 mating & unmating cycles		
Recommended Soldering Temperature:		Wave soldering peaked at 260°C for 5 secs max.		
<b>Operating</b> Te	mperature:	-55°C to + 85°C		
UL File:		E135615		

Insulation resistance:	$500~\text{M}\Omega$ min. at 500V DC for 2 mins max.
Current Rating:	1.25 Amps per contact
Voltage Rating:	125 Volts AC
DWV:	1000 VAC, 60 Hz. 1 min.
LED Forward DC Current:	20mA typical
LED Forward Voltage:	1.9 Volts max. at 2mA (for single colours) 2.6 Volts max. at 20mA (for bicolours)

**Electrical** 

**Contact Resistance:** 

LED Forward Voltage:	<ul><li>1.9 Volts max. at 2mA (for single colours)</li><li>2.6 Volts max. at 20mA (for bicolours)</li></ul>
LED Reverse Voltage:	5 Volts min.
LED Light Intensity:	0.4 to 1.5 mcd min. at 2mA (for single colours) 0.5 mcd min. at 2mA (for bicolours)
LED Wave Length:	Yellow: $587 \pm 7$ nm measured at 20mA Green: $565 \pm 6$ nm measured at 20mA Red: $625 \pm 5$ nm measured at 20mA

20 mΩ max.

## details **ORDERING INFORMATION**

Note: IR Reflow compatible version also available; Consult factory for



CAT 6, RIGHT ANGLE, RECESSED, LOW PROFILE, WITH LEDS

# **Single Port**

RJE71

**RJE71-188-1XXX** 



## **Multi Port**

#### RJE71-488-1XX1



#### Didn't find what you were looking for?

Please contact sales@amphenolcanada.com and let us know what you need.



CAT 6

CAT 5e/CAT 6, 1 OVER 1 PORT WITH LEDs

# CAT 5e, CAT 6, 1 OVER 1 PORT WITH LEDs

The RJE1R series is a unique 2x1 stacked connector. Two 8P8C ports with the option to choose from three different performances levels for each individual port: Cat5 equivalent, Cat5e, or Cat6. Each port will meet their designated performance as per EIA-568-C.2. Shielding available for increased EMI performance and LEDs for link activity and network speed verification.

# **SPECIFICATIONS**

Material				
Insulator:	High temp. thermoplastic; Complies with UL 94V-0; Black			
Contacts:	Phosphor bronze hard temper with gold thickness options ( $6\mu$ ", $15\mu$ ", $30\mu$ ", $50\mu$ ") over $50\mu$ " min. nickel on contact mating area; $100\mu$ " min. matte tin plating on solder tails			
Shield:	Stainless ste	Stainless steel with tin dipped tails		
LED:	Tin plating on LED tails			
Mechanical				
Insertion Forc	e:	5 lbs max.		
Pull Retention	Force:	20 lbs min.		
Durability:		750 mating & unmating cycles		
Recommende Soldering Tem		IR reflow peaked at 260°C for 5 to 8 secs.		
Operating Ten	nperature:	-55°C to + 85°C		

### Electrical

Liccultur	
<b>Contact Resistance:</b>	20 mΩ max.
Insulation resistance:	500 $M\Omega$ min. at 500V DC for 2 mins max.
Current Rating:	1.25 Amps per contact
Voltage Rating:	125 Volts AC
DWV:	1000 VAC, 60 Hz. 1 min.
LED Forward DC Current:	20mA typical
LED Forward Voltage:	1.9 Volts max. at 2mA (for single colours) 2.6 Volts max. at 20mA (for bicolours)
LED Reverse Voltage:	5 Volts min.
LED Light Intensity:	0.4 to 1.5 mcd min. at 2mA (for single colours) 0.5 mcd min. at 2mA (for bicolours)
LED Wave Length:	Yellow: 587 $\pm$ 7 nm measured at 20mA Green: 565 $\pm$ 6 nm measured at 20mA Red: 625 $\pm$ 5 nm measured at 20mA
UL File Number:	E135615

Note: IR Reflow is not recommended for connectors with LEDs

# **ORDERING INFORMATION**

Number of Ports	Contact Tail Length
2 - 1 over 1 ports	1 - 3.60mm
	2 - 3.20mm
Number of Contacts (Top)	3 - 2.80mm
8 - 8 Contacts	LED Options
Number of Contacts (Bottom)	Click to view page 3 for options
8 - 8 Contacts	Contact Plating
Top Port Category Options	1 - 6μ″ gold plating
1 - CAT 5	2 - 15µ" gold plating
2 - CAT 5e	3 - 30µ" gold plating
3 - CAT 6	4 - 50μ" gold plating
Bottom Port Category Options	Shield Options
1 - CAT 5	0 - No Shield
2 - CAT 5e	3 - Full shield with top tabs only
3 - CAT 6	5 - Full shield with top and side tabs
	6 - Full shield with no tabs



# **One Over One Port**

#### RJE1R-288-XX3X-XX

### Shielded





**FRONT VIEW** 

**SIDE VIEW** 



**RECOMMENDED PCB LAYOUT** 

Measurements: mm

#### Notes

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CAT 6A, SINGLE PORT, LOW PROFILE, WITH LEDs

# **VERTICAL, LOW PROFILE, WITH LEDs**

The RJE4A series of modular jacks meet CAT 6A performance per EIA-568-C.2. It supports Gigabit Ethernet Protocols. Shielding available for increased EMI performance and LEDs for link activity and network speed verification.

# **SPECIFICATIONS**

Material					
Insulator:	<b>.</b> .	High temp. thermoplastic; Complies with UL 94V-0; Black			
Contacts:	Phosphor bronze hard temper with gold thickness options ( $6\mu$ ", $15\mu$ ", $30\mu$ ", $50\mu$ ") over $50\mu$ " min. nickel on contact mating area; $100\mu$ " min. matte tin plating on solder tails				
Shield:	Stainless ste	eel with tin dipped tails			
LED:	Tin plating	on LED tail			
Mechanical					
Insertion Force:		5 lbs max.			
Pull Retention Force:		20 lbs min.			
Durability:		750 mating & unmating cycles			
Recommende Soldering Ter		Wave soldering peaked at 260°C for 5 secs max. or lead free reflow soldering up to 260°C for 10 secs for one cycle with an LED defect rate of no more than 1000ppm			
<b>Operating Te</b>	mperature:	-55°C to + 85°C			
UL File Number:		E135615			
Note: Multiple exposures not recommended					

E	lec	tri	ica

<b>Contact Resistance:</b>	20 mΩ max.
Insulation resistance:	500 $M\Omega$ min. at 500V DC for 2 mins max.
Current Rating:	1.25 Amps per contact
Voltage Rating:	125 Volts AC
DWV:	1000 VAC, 60 Hz. 1 min.
LED Forward DC Current:	20mA typical
LED Forward Voltage:	1.9 Volts max. at 2mA (for single colours) 2.6 Volts max. at 20mA (for bicolours)
LED Reverse Voltage:	5 Volts min.
LED Light Intensity:	0.4 to 1.5 mcd min. at 2mA (for single colours) 0.5 mcd min. at 2mA (for bicolours)
LED Wave Length:	Yellow: 587 $\pm$ 7 nm measured at 20mA Green: 565 $\pm$ 6 nm measured at 20mA Red: 625 $\pm$ 5 nm measured at 20mA

Note: Multiple exposures not recommended

# **ORDERING INFORMATION**



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RJE4A



# **Single Port**



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**BACK VIEW** 



.642

.110



**SIDE VIEW** 



**RECOMMENDED PCB LAYOUT** 

Shielded



#### **SIDE VIEW**





**BACK VIEW** 

[11.43]

#### **RJE4A-188-XXX1**

RJE4A-188-0X01

The RJE7B series of modular jacks meet CAT 6A performance per EIA-568-C.2. It supports Gigabit Ethernet Protocols and 10G Ethernet over lengths of up to 100m. Shielding

CAT 6A, RIGHT ANGLE, STANDARD PROFILE, WITH LEDS

available for increased EMI performance and LEDs for link activity and network speed verification.

# SPECIFICATIONS

Material

details

Insulator:	High temp. thermoplastic;		Contact Resi
	Complies w	Complies with UL 94V-0; Black colour	
		rronze hard temper with gold thickness ", 15μ", 30μ", 50μ") over 50μ" min. nickel on	Current Rati
	contact mating area; 100 $\mu$ " min. matte tin plating on solder tails		Voltage Rati
	soluer tails		DWV:
Shield:	Stainless ste	Stainless steel with tin dipped tails	
LED:	Tin plating	Tin plating on LED tails	
			LED Forward
Mechanica	al		
Insertion For	ce:	5 lbs max.	LED Reverse
Pull Retentio	n Force:	20 lbs min.	LED Light In
Durability:		750 mating & unmating cycles	
Recommende Soldering Ter		IR reflow peaked at 260°C for 5 to 8 secs.	LED Wave Length:
<b>Operating</b> Te	mperature:	-55°C to + 85°C	
UL File Numb	er:	E135615	

**RIGHT ANGLED, STANDARD PROFILE, WITH LEDs** 

# Electrical

Contact Resistance:	20 mΩ max.
Insulation resistance:	500 $M\Omega$ min. at 500V DC for 2 mins max.
Current Rating:	1.25 Amps per contact
Voltage Rating:	125 Volts AC
DWV:	1000 VAC, 60 Hz. 1 min.
LED Forward DC Current:	20mA typical
LED Forward Voltage:	1.9 Volts max. at 2mA (for single colours) 2.6 Volts max. at 20mA (for bicolours)
LED Reverse Voltage:	5 Volts min.
LED Light Intensity:	0.4 to 1.5 mcd min. at 2mA (for single colours) 0.5 mcd min. at 2mA (for bicolours)
LED Wave Length:	Yellow: 587 $\pm$ 7 nm measured at 20mA Green: 565 $\pm$ 6 nm measured at 20mA Red: 625 $\pm$ 5 nm measured at 20mA

## **ORDERING INFORMATION**

Note: IR Reflow compatible version also available; Consult factory for



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**RJE7B** 



# **Single Port**

#### **RJE7B-188-1XXX**



**Notes** 

97

RJE60 CAT 6A, RIGHT ANGLE, STANDARD PROFILE, WITH LEDS

# **RIGHT ANGLED, STANDARD PROFILE, WITH LEDs**

The RJE60 series of modular jacks meet CAT 6A performance per EIA-568-C.2. It supports Gigabit Ethernet Protocols. Shielding is available for increased EMI performance and LEDs for link activity and network speed verification.

# **SPECIFICATIONS**

Material			Electrical	
Insulator:			<b>Contact Resistance:</b>	20 mΩ max.
Complies with UL 94V-0; Black		Insulation resistance:	500 M $\Omega$ min. at 500V DC for 2 mins max.	
		pronze hard temper with gold thickness ", 15µ", 30µ", 50µ") over 50µ" min. nickel on	Current Rating:	1.25 Amps per contact
		ting area; 100 $\mu$ " min. matte tin plating on	Voltage Rating:	125 Volts AC
solder tails			DWV:	1000 VAC, 60 Hz. 1 min.
Shield: LED:	Stainless steel with tin dipped tails Tin plating on LED tail		LED Forward DC Current:	20mA typical
Mechani	cal		LED Forward Voltage:	1.9 Volts max. at 2mA (for single colours) 2.6 Volts max. at 20mA (for bicolours)
Insertion Fo	orce:	5 lbs max.	LED Reverse Voltage:	5 Volts min.
Pull Retenti	ion Force:	20 lbs min.	LED Light Intensity:	0.4 to 1.5 mcd min. at 2mA (for single
Durability:		750 mating & unmating cycles		colours) 0.5 mcd min. at 2mA (for bicolours)
Recomment Soldering T	ded emperature:	Wave soldering peaked at 260°C for 10 secs max. for one cycle with an LED defect rate of no more than 100ppm	LED Wave Length:	Yellow: 587 $\pm$ 7 nm measured at 20mA Green: 565 $\pm$ 6 nm measured at 20mA Red: 625 $\pm$ 5 nm measured at 20mA
<b>Operating</b> T	Cemperature:	-55°C to + 85°C		
UL File Num	nber:	E135615		

Note: Multiple exposure not recommended; IR Reflow compatible version also available; Consult factory for details

# **ORDERING INFORMATION**





CAT 6A

# RJE60

CAT 6A, RIGHT ANGLE, STANDARD PROFILE, WITH LEDS

# **Single Port**

**Shielded - Option 5** 





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#### **TOP VIEW**

RJE60-188-5XX1



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RJE60-188-3XX1

98

CAT 6A, RIGHT ANGLE, STANDARD PROFILE, WITH LEDS

#### RJE60-188-6XX1



**Notes** 



## **RJ45 COUPLER**

The RJE17 coupler provides connections through barriers such as equipment covers and panels. They are locked into place with a panel latch for secure mounting. Available in CAT 3 and CAT 5e performance. The added shielding provides optional EMI protection.

# **SPECIFICATIONS**

Material		
Insulator:	Engineering thermoplastic; Complies with UL 94V-0; Black	
Contacts:	Phosphor bronze hard temper with several gold thickness options over $50\mu''$ min. nickel on contact mating area (refer to drawing below)	
Shield:	Stainless steel with tin dipped tails	
Electrical		
<b>Contact Resist</b>	ance:	20 mΩ max.
Insulation resi	stance:	500 $M\Omega$ min. at 500V DC for 2 mins max.
<b>Current Rating</b>	<b>j:</b>	1.25 Amps per contact
Voltage Rating	j:	125 Volts AC
DWV:		1000 VAC, 60 Hz. 1 min.

Mechanical	
Insertion Force:	5 lbs max.
Pull Retention Force:	20 lbs min.
Durability:	750 mating & unmating cycles
<b>Operating Temperature:</b>	-40°C to + 70°C
<b>Operating Temperature:</b>	-40°C to + 85°C
UL File Number	E136228

## **ORDERING INFORMATION**



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# **Single Port**

#### RJE17-288-1X21





Notes

# STACKED

# **Right Angle**

**RJSDE** 



RJSAR



**RJSFE** 



# **HIGH PERFORMANCE**

# CAT 5e

**RJE1A** 



RJE2A

RJE72



# CAT 6

RJE1B



# CAT 6A

RJE1C



RJE50



# **DUST COVERS & OTHERS**

# **Dust Covers**

FRJ-2611





FRJ-2411



# Other

RJE1L



ADDITIONAL



# Amphenol ICC

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