

ROHS

Micro Commercial Components

Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

Phone: (818) 701-4933 Fax: (818) 701-4939

1N4148

Features

- High Reliability
- Low Current Leakage
- Metalurgically Bonded Construction
- Moisture Sensitivity Level 1
- Marking: Cathode band and type number
- Lead Free Finish/Rohs Compliant (Note1) ("P"Suffix designates Compliant. See ordering information)

500mW High Speed Switching Diode 100 Volt

Maximum Ratings

- Operating Temperature: -65[°]C to +175[°]C
- Storage Temperature: -65[°]C to +175[°]C
- Maximum Thermal Resistance: 300K/W Junction To Ambient

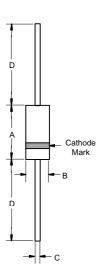
Electrical Characteristics @ 25 $^{\circ}$ C Unless Otherwise Specified

Reverse Voltage	V_R	75V	
Breakdown Voltage	V_{BR}	100V	I _R =100 μ A
Average Forward Current	Io	150mA	
Power Dissipation	P_{TOT}	500mW	
Junction Temperature	TJ	175℃	
Peak Forward Surge Current	I _{FSM}	2.0A	$t_p = 1.0 \mu\mathrm{s}$
Maximum Instantaneous Forward Voltage	V _F	1.0V	I _{FM} = 10mA
Maximum DC Reverse Current At Rated DC Blocking Voltage	I _R	25nA 5.0μA 50μA	V_R =20V; T_J = 25°C V_R =75V; T_J = 25°C V_R =20V; T_J =150°C
Maximum Junction Capacitance	CJ	4.0pF	Measured at 1.0MHz, V _R =0V
Maximum Reverse Recovery Time	T _{rr}	4.0ns	$I_F=10\text{mA}; V_R=6V$ $R_L=100\Omega$

^{*}Pulse test: Pulse width 300 µsec, Duty cycle 2%

Note: 1. Lead in Glass Exemption Applied, see EU Directive Annex 7(C)-I.

DO-35



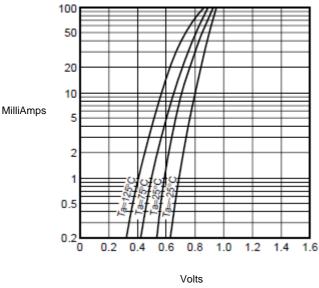
DIMENSIONS								
	INCHES		MM					
DIM	MIN	MAX	MIN	MAX	NOTE			
Α		.166		4.2				
В		.079		2.00				
С		.020		.52				
D	1.000		25.40					

1N4148

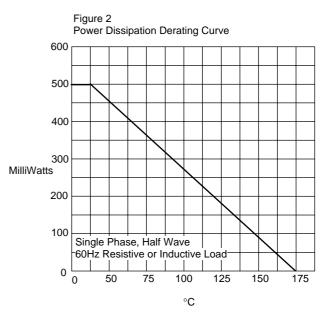


Micro Commercial Components

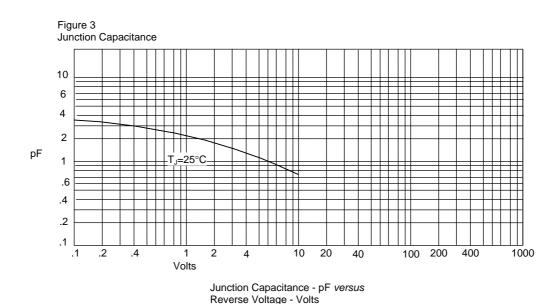
Figure 1
Typical Forward Characteristics



Instantaneous Forward Current - MilliAmperes *versus* Instantaneous Forward Voltage - Volts



Admissable Power Dissipation - MilliWatts versus Junction Temperature - $^{\circ}C$



1N4148



Figure 4
Typical Reverse Characteristics

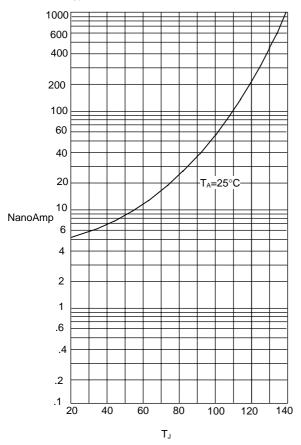


Figure 5
Peak Forward Surge Current

2400
2000
1600
1200
400
0
1 2 4 6 8 10 20 40 60 80 100

Cycles

Peak Forward Surge Current - Amperes *versus* Number Of Cycles At 60Hz - Cycles

Instantaneous Reverse Leakage Current - NanoAmperes versus Junction Temperature - $^{\circ}$ C



Micro Commercial Components

Ordering Information:

Device	Packing	
Part Number-TP	Tape&Reel: 10Kpcs/Reel	
Part Number-AP	Ammo Packing: 5Kpcs/Ammo Box	
Part Number-BP	Bulk: 100Kpcs/Carton	

IMPORTANT NOTICE

Micro Commercial Components Corp. reserves the right to make changes without further notice to any product herein to make corrections, modifications, enhancements, improvements, or other changes. **Micro Commercial Components Corp.** does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others. The user of products in such applications shall assume all risks of such use and will agree to hold **Micro Commercial Components Corp.** and all the companies whose products are represented on our website, harmless against all damages.

LIFE SUPPORT

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

CUSTOMER AWARENESS

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources. MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Micro Commercial Components (MCC): 1N4148