NOT RECOMMENDED FOR NEW DESIGNS **USE S1A-LTP~S1M-LTP SERIES**



Micro Commercial Components



Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

Phone: (818) 701-4933

(818) 701-4939 Fax:

S₁A **THRU** S₁M

Features

- Lead Free Finish/Rohs Compliant (Note1) ("P"Suffix designates Compliant. See ordering information) For Surface Mount Applications
- Extremely Low Thermal Resistance
- Easy Pick And Place
- High Temp Soldering: 260°C for 10 Seconds At Terminals
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

Maximum Ratings

- Operating Temperature: -55°C to +150°C Storage Temperature: -55°C to +150°C
- Maximum Thermal Resistance; 30°C/W Junction To Lead

MCC	Device	Maximum	Maximum	Maximum
Catalog	Marking	Recurrent	RMS	DC
Number		Peak Reverse	Voltage	Blocking
		Voltage		Voltage
S1A	S1A	50V	35V	50V
S1B	S1B	100V	70V	100V
S1D	S1D	200V	140V	200V
S1G	S1G	400V	280V	400V
S1J	S1J	600V	420V	600V
S1K	S1K	800V	560V	800V
S1M	S1M	1000V	700V	1000V

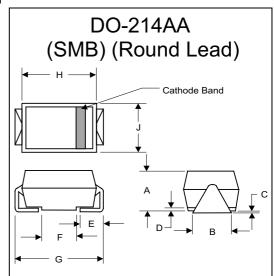
Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward current	$I_{F(AV)}$	1.0A	T _J = 100°C
Peak Forward Surge Current	I _{FSM}	30A	8.3ms, half sine,
Maximum Instantaneous Forward Voltage	V_{F}	1.1V	I _{FM} = 1.0A; T _J = 25°C*
Maximum DC Reverse Current At Rated DC Blocking Voltage	I _R	5μA 50μA	T _J = 25°C T _J = 125°C
Typical Junction Capacitance	С	12pF	Measured at 1.0MHz, V _R =4.0V
Maximum Reverse Recovery Time	T _m	2.0μs	$I_F = 0.5A; I_R = 1.0A;$ $I_{rr} = 0.25A;$

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

Note: 1. High Temperature Solder Exemptions Applied, see EU Directive Annex 7.

1 Amp Silicon Rectifier 50 to 1000 Volts



DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
Α	.078	.116	1.98	2.95	
В	.075	.089	1.90	2.25	
С	.002	.008	.05	.20	
D		.02		.51	
E	.035	.055	.90	1.40	
F	.065	.091	1.65	2.32	
G	.205	.224	5.21	5.69	
Н	.160	.180	4.06	4.57	
J	.130	.155	3.30	3.94	

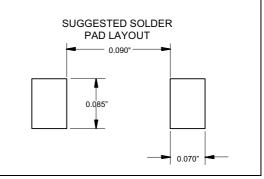
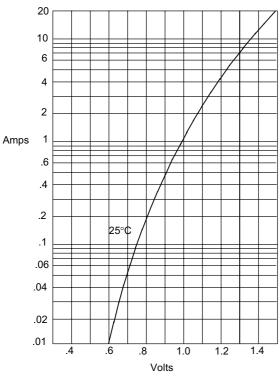




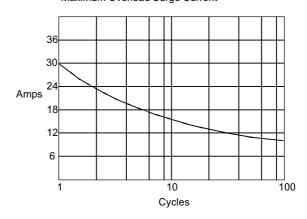


Figure 1 Typical Forward Characteristics



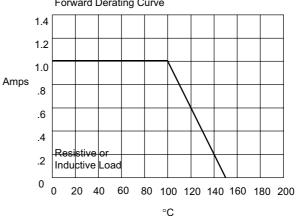
Instantaneous Forward Current - Amperesversus Instantaneous Forward Voltage - Volts

Figure 3 Micro Commercial Components
Maximum Overload Surge Current



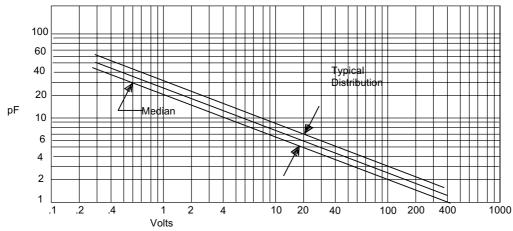
Peak Forward Current - Amperes*versus* Number of Cycles at 60Hz

Figure 4 Forward Derating Curve



Average Forward Rectified Current - Amperes/ersus Ambient Temperature - $^{\circ}$ C

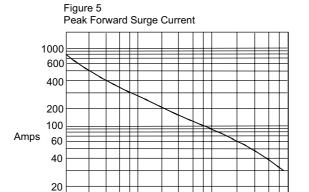
Figure 2 Junction Capacitance



Junction Capacitance - pF*versus*Reverse Junction Potential (Applied V + 0.7 Volts) - Volts

S1A thru S1M

.01 .02



Peak Forward Surge Current - Amperesversus Pulse Duration - Milliseconds (mS)

mS

.6 1

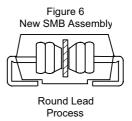
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.06 .1



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Ordering Information:

Device	Packing	
Part Number-TP	Tape&Reel: 3Kpcs/Reel	

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