### NOT RECOMMENDED FOR NEW DESIGNS **USE S2A-LTP~S2M-LTP SERIES**





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# S2A **THRU** S<sub>2</sub>M

### Features

- Lead Free Finish/Rohs Compliant (Note1) ("P"Suffix designates Compliant. See ordering information)
- For Surface Mount Applications
- 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; 16°C/W Junction To Lead

MCC	Device	Maximum	Maximum	Maximum
Catalog	Marking	Recurrent	RMS	DC
Number		Peak Reverse	Voltage	Blocking
		Voltage		Voltage
S2A	S2A	50V	35V	50V
S2B	S2B	100V	70V	100V
S2D	S2D	200V	140V	200V
S2G	S2G	400V	280V	400V
S2J	S2J	600V	420V	600V
S2K	S2K	800V	560V	800V
S2M	S2M	1000V	700V	1000V

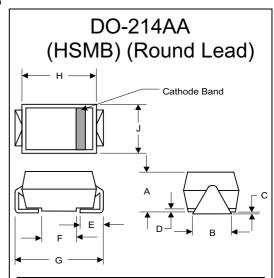
### Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward current	I <sub>F(AV)</sub>	2.0A	T <sub>J</sub> = 75°C			
Peak Forward Surge Current	I <sub>FSM</sub>	50A	8.3ms, half sine, T <sub>J</sub> = 150°C			
Maximum Instantaneous Forward Voltage	V <sub>F</sub>	1.15V	I <sub>FM</sub> = 2.0A; T <sub>J</sub> = 25°C*			
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	10μΑ 50μΑ	T <sub>J</sub> = 25°C T <sub>J</sub> = 125°C			
Maximum Reverse Recovery Time	T <sub>rr</sub>	2.0µs	I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A, I <sub>rr</sub> =0.25A			
Typical Junction Capacitance	CJ	30pF	Measured at 1.0MHz, V <sub>R</sub> =4.0V			

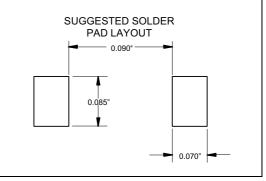
<sup>\*</sup>Pulse test: Pulse width 300 µsec, Duty cycle 2%

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

## 2 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			

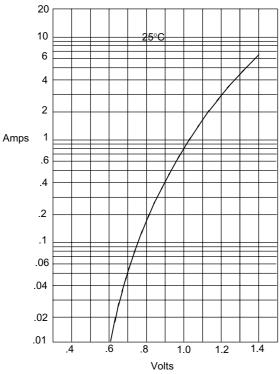


### S2A thru S2M

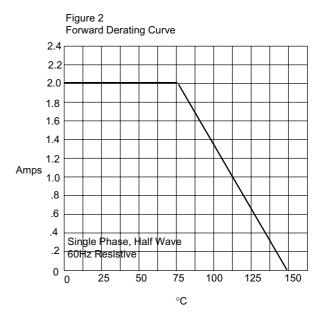
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Figure 1 Typical Forward Characteristics

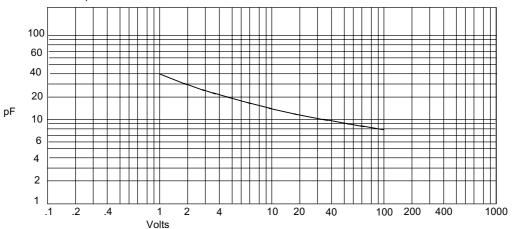


Instantaneous Forward Current - Amperesversus Instantaneous Forward Voltage - Volts



Average Forward Rectified Current - Amperes/ersus Ambient Temperature -°C



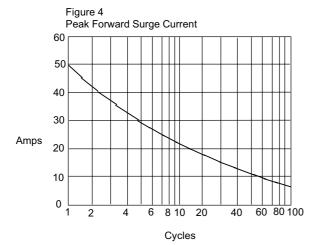


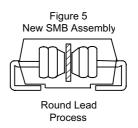
Junction Capacitance - pF*versus*Reverse Junction Potential (Applied V + 0.7 Volts) - Volts

## S2A thru S2M



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



## Ordering Information :

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

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