



**Micro Commercial Components** 

Micro Commercial Components 20736 Marilla Street Chatsworth

CA 91311

Phone: (818) 701-4933 Fax: (818) 701-4939 30S1 thru 30S10

# **Features**

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Peak Reverse Voltages Through 1000 Volts
- Glass Passivated Chip and High Surge Current Capability
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 1

# 3 Amp Medium Power Silicon Rectifier 50 - 1000 Volts

# **Maximum Ratings**

• Operating Temperature: -55°C to +150°C

• Storage Temperature: -55°C to +150°C

MCC Catalog Number	Device Marking	Maximum Reccurrent Peak Reverse	Maximum RMS Voltage	Maximum DC Blocking Voltage
		Voltage		Voltage
30S1	30S1	100V	70V	100V
30S2	30S2	200V	140V	200V
30S3	30S3	300V	210V	300V
30S4	30S4	400V	280V	400V
30S5	30S5	500V	350V	500V
30S6	30S6	600V	420V	600V
30S8	30S8	800V	560V	800V
30S10	30S10	1000V	700V	1000V

# T-18 Cathode

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

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Average Forward Current	I <sub>F(AV)</sub>	3.0A	T <sub>A</sub> = 100°C		
Peak Forward Surge Current	I <sub>FSM</sub>	80A	8.3ms, half sine		
Maximum Instantaneous Forward Voltage	$V_{F}$	1.0V	$I_{FM} = 3.0A;$ $T_{J} = 25^{\circ}C(Note 2)$		
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	5μΑ 10μΑ	T <sub>J</sub> = 25°C T <sub>J</sub> = 100°C		
Typical Junction Capacitance	CJ	100pF	Measured at 1.0MHz, V <sub>R</sub> =4.0V		

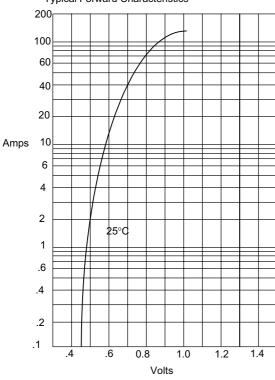
Notes:1.High Temperature Solder Exemption Applied, see EU Directive Annex 7. 2.Pulse test: Pulse width 300  $\mu$ sec, Duty cycle 1%

DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
Α	.330	.350	8.39	8.89	
В	.130	.145	3.31	3.68	
С	.038	.042	0.97	1.06	
D	1.00		25.40		

## 30S1 thru 30S10

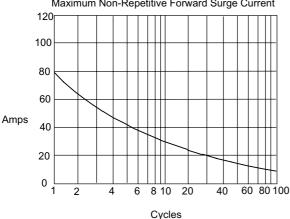


Figure 1
Typical Forward Characteristics



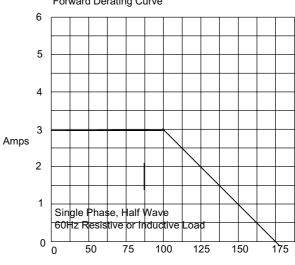
Instantaneous Forward Current - Amperesversus Instantaneous Forward Voltage - Volts

Figure 3
Maximum Non-Repetitive Forward Surge Current



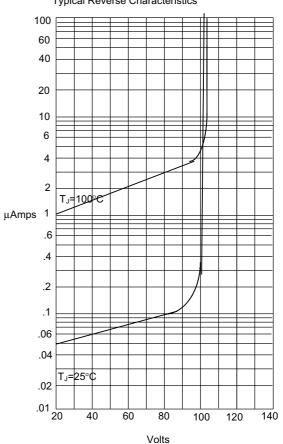
Peak Forward Surge Current - Amperesversus Number Of Cycles At 60Hz - Cycles

Figure 2 Micro Commercial Components
Forward Derating Curve



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

Figure 4
Typical Reverse Characteristics



Instantaneous Reverse Leakage Current - MicroAmperesersus
Percent Of Rated Peak Reverse Voltage - Volts



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# **Ordering Information**

Device	Packing	
(Part Number)-TP	Tape&Reel 3Kpcs/Reel	
(Part Number)-AP	Ammo Packing;3Kpcs/AmmoBox	
(Part Number)-BP	Bulk;1Kpcs/Box	

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