

**Micro Commercial Components** 



Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

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

**SR502 THRU SR5010** 

## Features

- Halogen free available upon request by adding suffix "-HF" Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Low Forward Voltage Drop and Low Switching Noise
- High Surge Current Capability and High Current Capability
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

## **Maximum Ratings**

- Operating Temperature: -50°C to +150°C
- Storage Temperature: -50°C to +150°C
- Maximum Thermal Resistance; 18°C/W Junction To Ambient

MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse	Maximum RMS Voltage	Maximum DC Blocking Voltage
		Voltage		i chage
SR502	SR502	20V	14V	20V
SR503	SR503	30V	21V	30V
SR504	SR504	40V	28V	40V
SR505	SR505	50V	35V	50V
SR506	SR506	60V	42V	60V
SR508	SR508	80V	56V	80V
SR5010	SR5010	100V	70V	100V

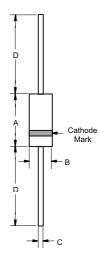
#### Electrical Characteristics @ 25°C Unless Otherwise Specified

			montanto operation
Average Forward Current	$I_{F(AV)}$	5.0A	T <sub>A</sub> = 85°C
Peak Forward Surge	I <sub>FSM</sub>	150A	8.3ms, half sine
Current			
Maximum			
Instantaneous			
Forward Voltage			
SR502-SR504	$V_{F}$	.55V	$I_{FM} = 5.0A;$
SR505-SR506		.70V	T <sub>A</sub> = 25°C
SR508-SR5010		.85V	
Maximum DC			
Reverse Current At	$I_R$	1.0mA	T <sub>A</sub> = 25°C
Rated DC Blocking			
Voltage			
Typical Junction	С	200pF	Measured at
Capacitance			1.0MHz, V <sub>R</sub> =4.0V

Notes:1.High Temperature Solder Exemption Applied, see EU Directive Annex 7.

# 5 Amp Schottky **Barrier Rectifier** 50 to 100 Volts

### **DO-201AD**

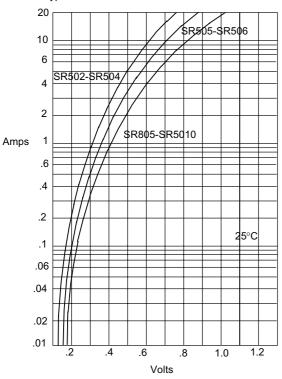


DIMENSIONS						
	INCHES		MM			
DIM	MIN	MAX	MIN	MAX	NOTE	
Α	.287	.374	7.30	9.50		
В	.189	.208	4.80	5.30		
С	.048	.052	1.20	1.30		
D	1.000		25.40			



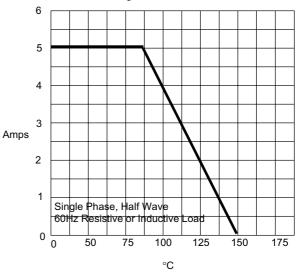
## SR502 thru SR5010

Figure 1
Typical Forward Characteristics



Instantaneous Forward Current - Amperesversus Instantaneous Forward Voltage - Volts

Figure 2 Micro Commercial Components
Forward Derating Curve



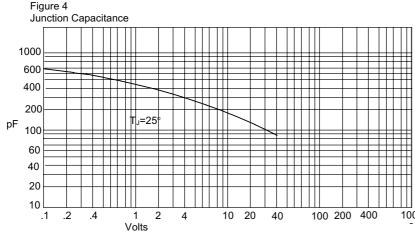
Average Forward Rectified Current - Amperes/ersus Ambient Temperature - $^{\circ}$ C

Figure3
Maximum Non-Repetitive Forward Surge Current

150
125
100
75
Amps 50
25
0 1 2 4 6 8 10 20 40 60 80 100

Cycles

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



Junction Capacitance - pF versus



## **Ordering Information:**

Device	Packing	
Part Number-TP	Tape&Reel: 1.2Kpcs/Reel	
Part Number-AP	Ammo Packing: 1.2Kpcs/Ammo Box	
Part Number-BP	Bulk: 12 Kpcs/Carton	

Note: Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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