

M·C·C·

Micro Commercial Components



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**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 Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
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

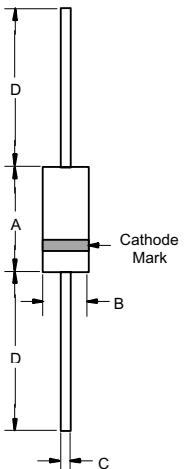
Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	5.0A	$T_A = 85^\circ C$
Peak Forward Surge Current	I_{FSM}	150A	8.3ms, half sine
Maximum Instantaneous Forward Voltage SR502-SR504 SR505-SR506 SR508-SR5010	V_F	.55V .70V .85V	$I_{FM} = 5.0A$; $T_A = 25^\circ C$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	1.0mA	$T_A = 25^\circ C$
Typical Junction Capacitance	C_J	200pF	Measured at 1.0MHz, $V_R=4.0V$

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

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

DO-201AD

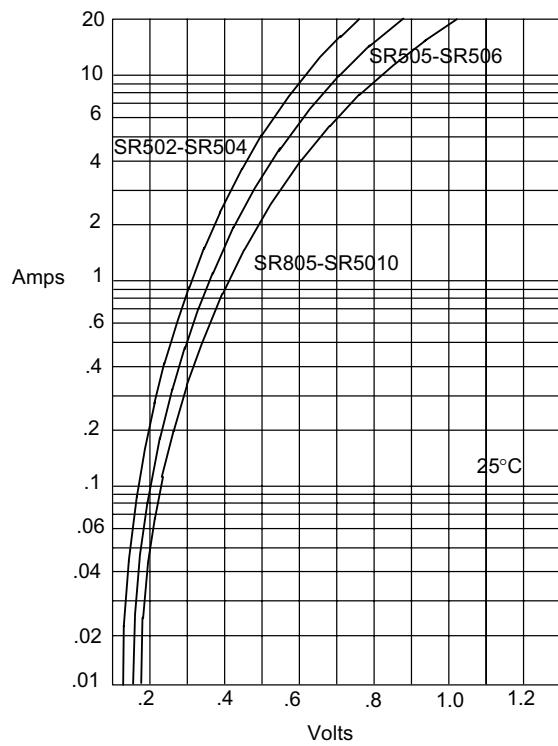


DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.287	.374	7.30	9.50	
B	.189	.208	4.80	5.30	
C	.048	.052	1.20	1.30	
D	1.000	—	25.40	—	

www.mccsemi.com

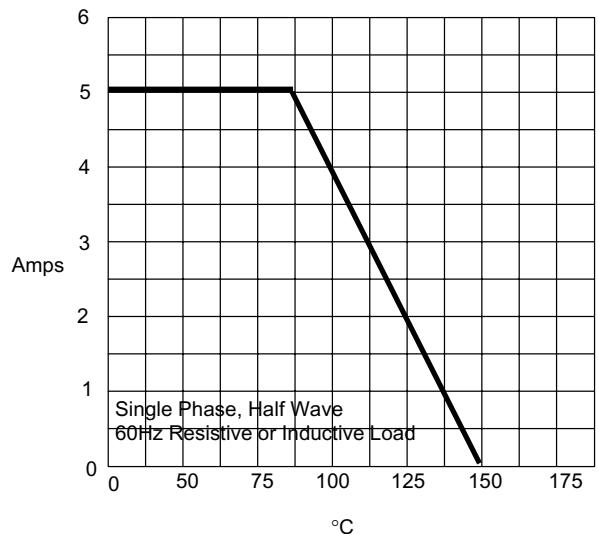
SR502 thru SR5010

Figure 1
Typical Forward Characteristics



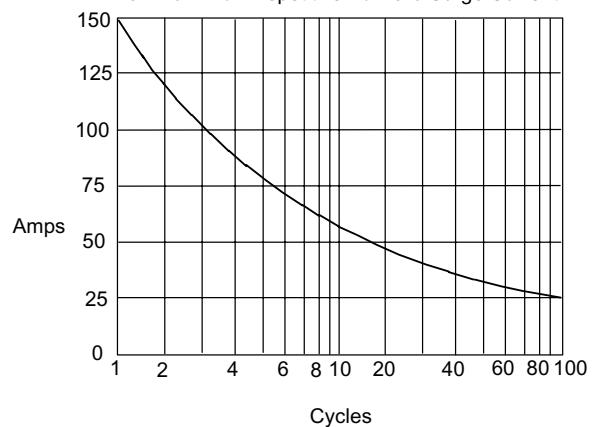
Instantaneous Forward Current - Amperes versus
Instantaneous Forward Voltage - Volts

Figure 2
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Forward Derating Curve



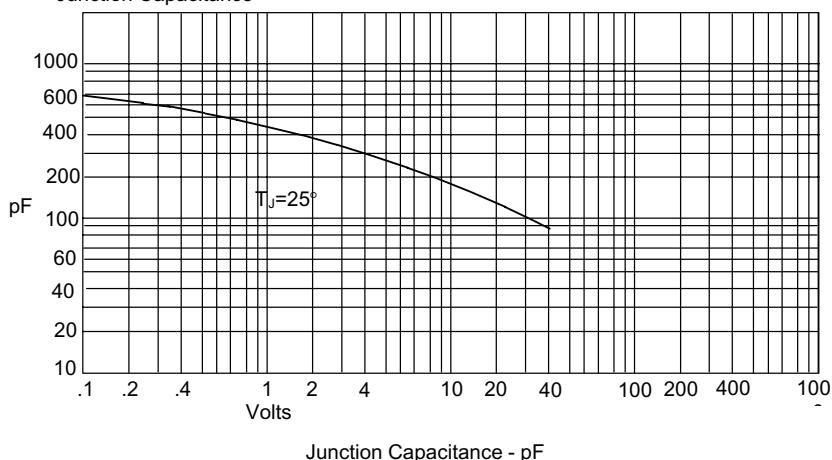
Average Forward Rectified Current - Amperes versus
Ambient Temperature - °C

Figure 3
Maximum Non-Repetitive Forward Surge Current



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

Figure 4
Junction Capacitance



Junction Capacitance - pF
versus



TM

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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: 12Kpcs/Carton

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

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