



Micro Commercial Components  
 21201 Itasca Street Chatsworth  
 CA 91311  
 Phone: (818) 701-4933  
 Fax: (818) 701-4939

# SR502 THRU SR5010

## 5 Amp Schottky Barrier Rectifier 50 to 100 Volts

### Features

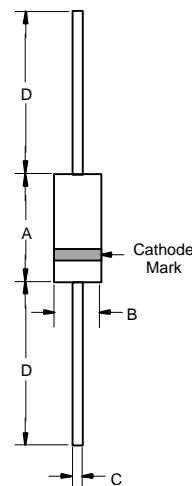
- Low Switching Noise
- Low Forward Voltage Drop
- High Current Capability
- High Surge Current Capability

### 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

### DO-201AD



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

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

DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	---	.370	---	9.50	
B	---	.250	---	6.40	
C	.048	.052	1.20	1.30	
D	1.000	---	25.40	---	

\*Pulse test: Pulse width 300  $\mu\text{sec}$ , Duty cycle 1%

# SR502 thru SR5010

Figure 1  
Typical Forward Characteristics

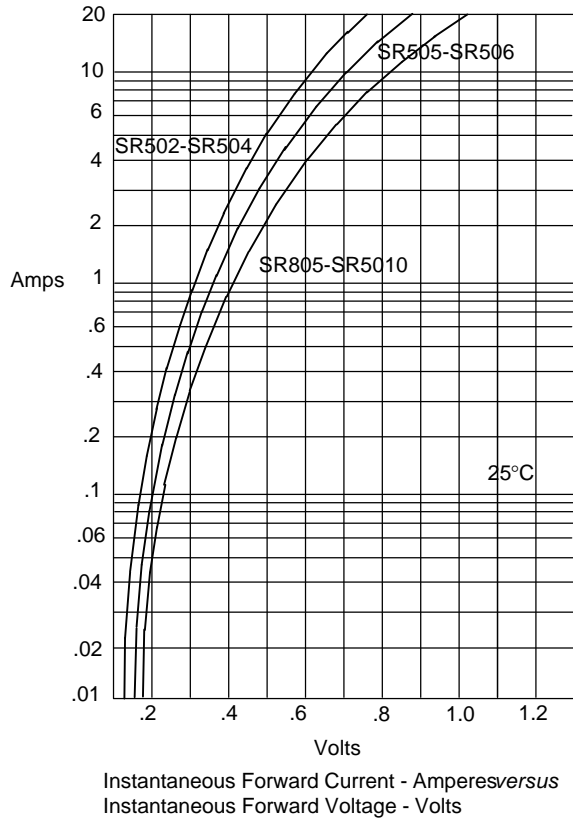
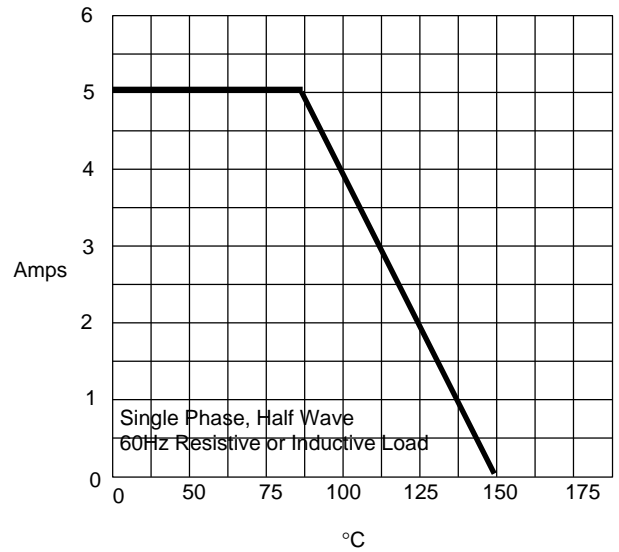
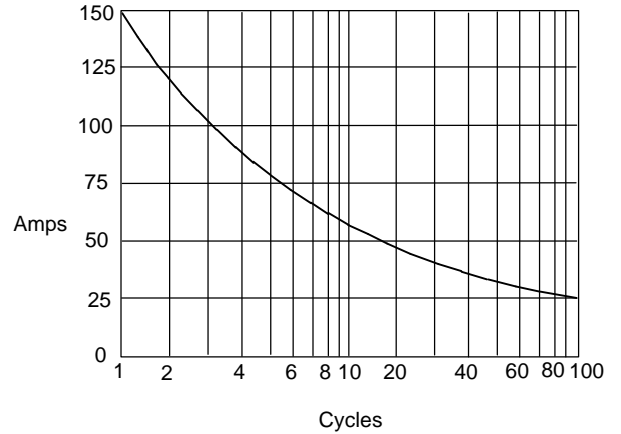


Figure 2  
Forward Derating Curve



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

