

# SR502 thru SR510

## Features

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

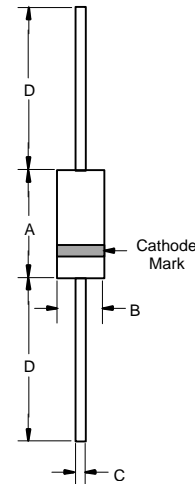
## 5 Amp Schottky Barrier Rectifier 50 - 100 Volts

## Maximum Ratings

- Operating Temperature: -65°C to +150°C
- Storage Temperature: -65°C to +150°C
- Maximum Thermal Resistance; 18°C/W Junction To Ambient

Microsemi Catalog Number	Device Marking	Maximum Reccurent 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
SR510	SR510	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 .75V	$I_{FM} = 5.0A$ ; $T_A = 25^\circ\text{C}^*$
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%

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Figure 1  
Typical Forward Characteristics

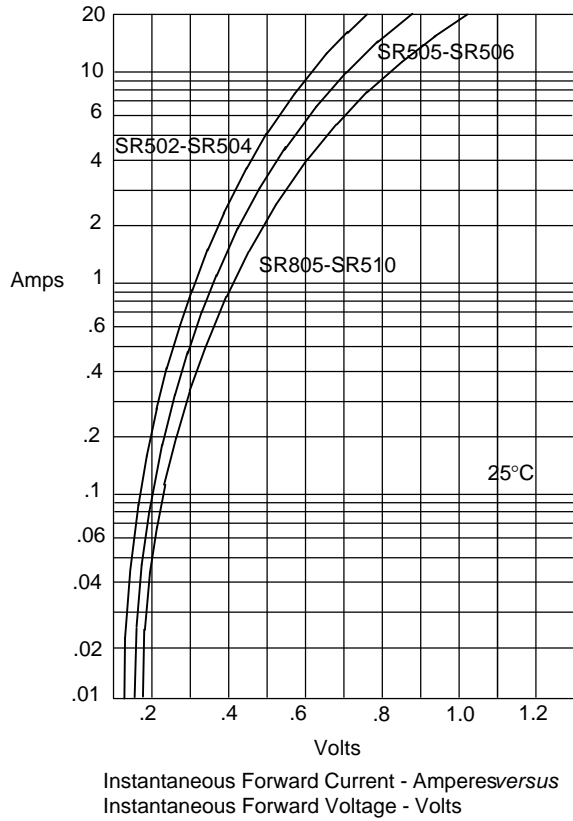
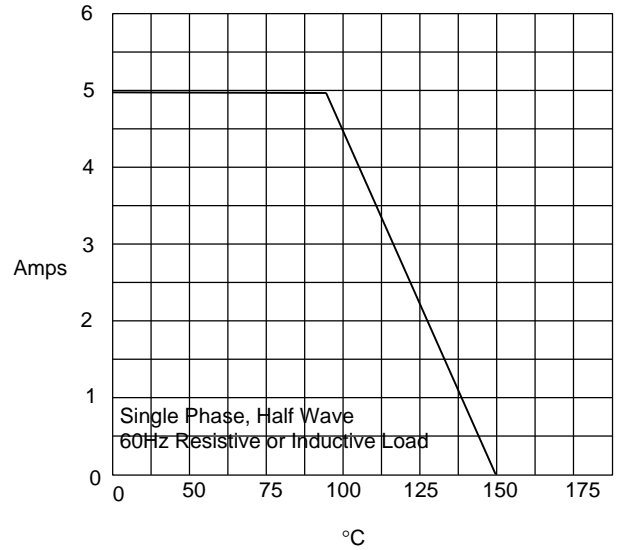
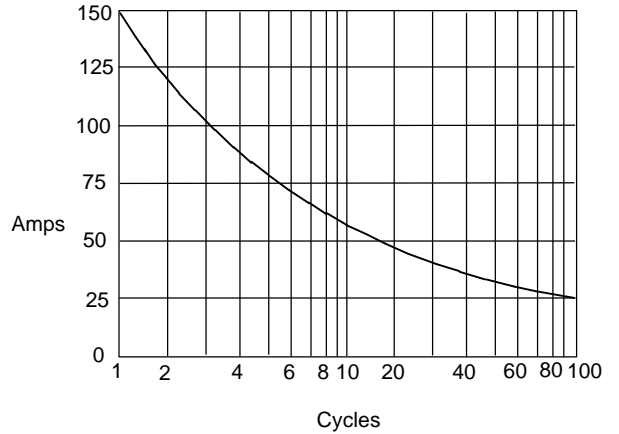


Figure 2  
Forward Derating Curve



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

