



Micro Commercial Components

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20736 Marilla Street Chatsworth  
CA 91311  
Phone: (818) 701-4933  
Fax: (818) 701-4939

# SRA501GP THRU SRA507GP

## Features

- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Glass Passivated Chip
- Low Leakage, Low cost
- Low Forward Voltage Drop
- High Current Capability
- For Automotive Applications
- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)

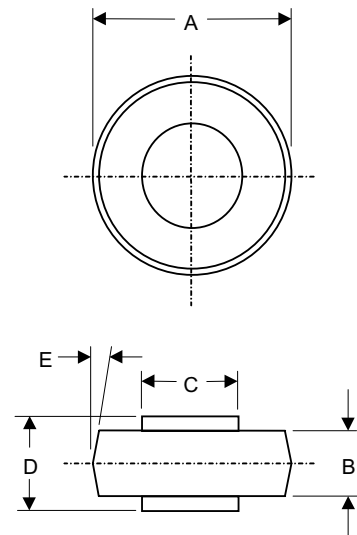
## Maximum Ratings

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

MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SRA501GP	---	50V	35V	50V
SRA502GP	---	100V	70V	100V
SRA503GP	---	200V	140V	200V
SRA504GP	---	400V	280V	400V
SRA505GP	---	600V	420V	600V
SRA506GP	---	800V	560V	800V
SRA507GP	---	1000V	700V	1000V

## 50Amp Glass Passivated Rectifier 50 to 1000 Volts

### SRA



## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	50A	$T_C = 125^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	500A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_F$	1.0V	$I_{FM} = 25\text{A};$ $T_J = 25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	10 $\mu\text{A}$ 250 $\mu\text{A}$	$T_J = 25^\circ\text{C}$ $T_J = 55^\circ\text{C}$
Typical Junction Capacitance	$C_J$	100pF	Measured at 1.0MHz, $V_R=4.0\text{V}$

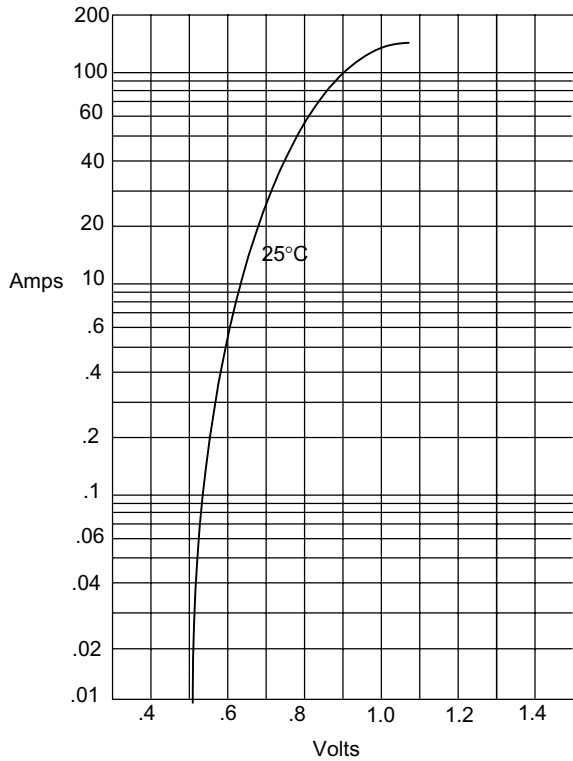
DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	.332	.342	8.43	8.69	
B	.165	.175	4.19	4.45	
C	.218	.222	5.54	5.64	
D	.234	.246	5.94	6.25	
E	---	5'	---	5'	

\*Pulse test: Pulse width 300  $\mu\text{sec}$ , Duty cycle 2%

Note: 1. High Temperature Solder Exemptions Applied, see EU Directive Annex 7.

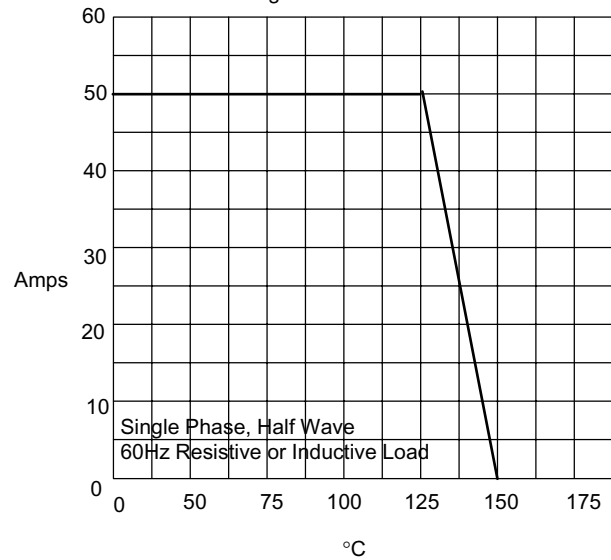
SRA501GP thru SRA507GP

Figure 1  
Typical Forward Characteristics



Instantaneous Forward Current - Amperes *versus* Instantaneous Forward Voltage - Volts

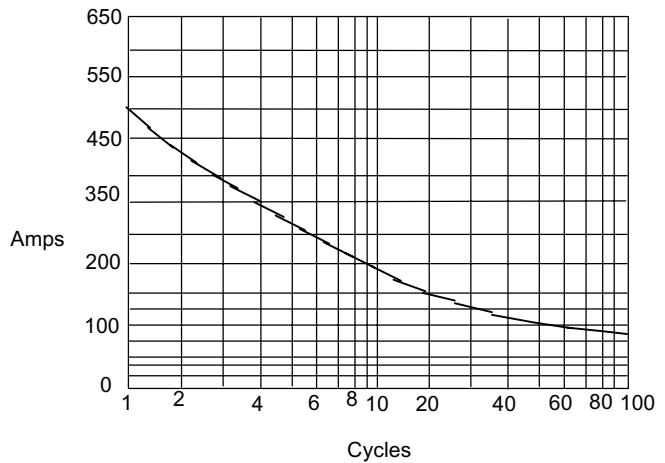
Figure 2  
Forward Derating Curve



Single Phase, Half Wave  
60Hz Resistive or Inductive Load

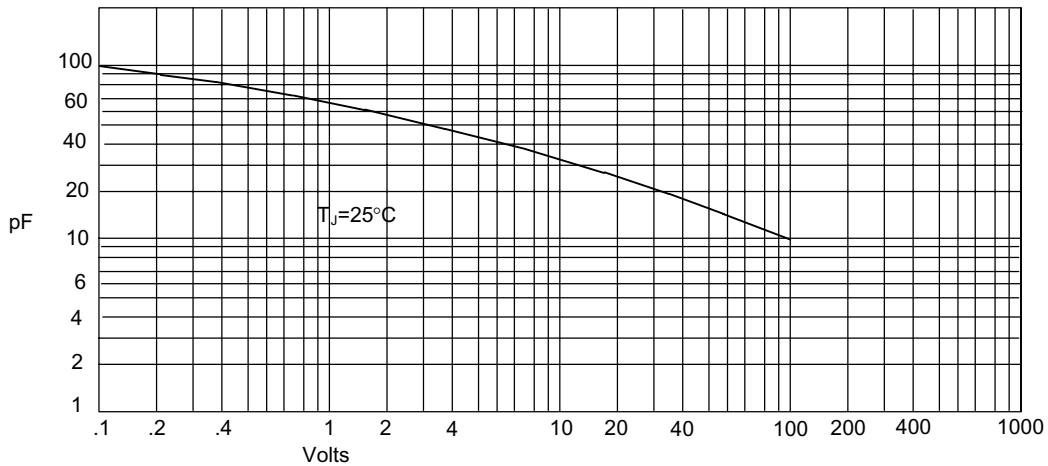
Average Forward Rectified Current - Amperes *versus* Case Temperature - °C

Figure 4  
Peak Forward Surge Current



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

Figure 3  
Junction Capacitance



Junction Capacitance - pF *versus* Reverse Voltage - Volts



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Ordering Information :

Device	Packing
Part Number-BP	Bulk: 1Kpcs/Box

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