

**M·C·C·**

Micro Commercial Components



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

**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

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

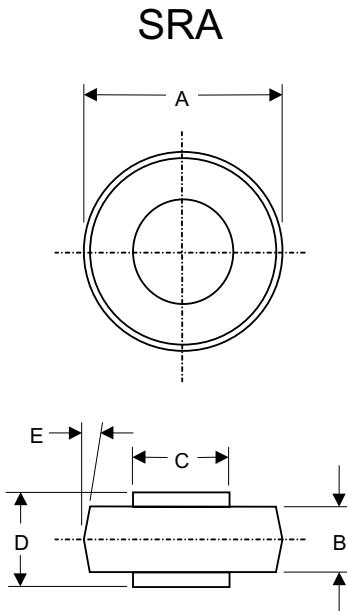
Average Forward Current	$I_{F(AV)}$	50A	$T_C = 125^\circ C$
Peak Forward Surge Current	$I_{FSM}$	500A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_F$	1.0V	$I_{FM} = 25A$ ; $T_J = 25^\circ C$ *
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	$10 \mu A$ $250 \mu A$	$T_J = 25^\circ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

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

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

**SRA501GP**  
**THRU**  
**SRA507GP**

**50Amp Glass**  
**Passivated Rectifier**  
**50 to 1000 Volts**



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
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'	

**www.mccsemi.com**

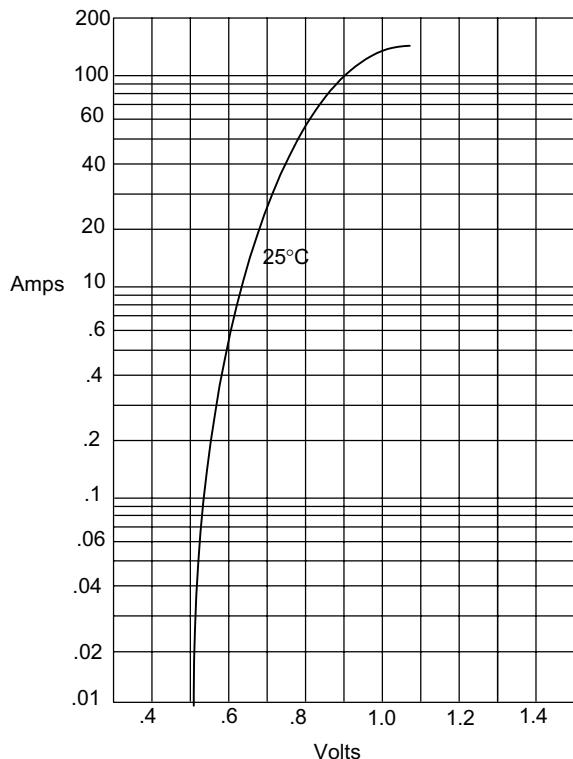
# SRA501GP thru SRA507GP

**M·C·C**

TM

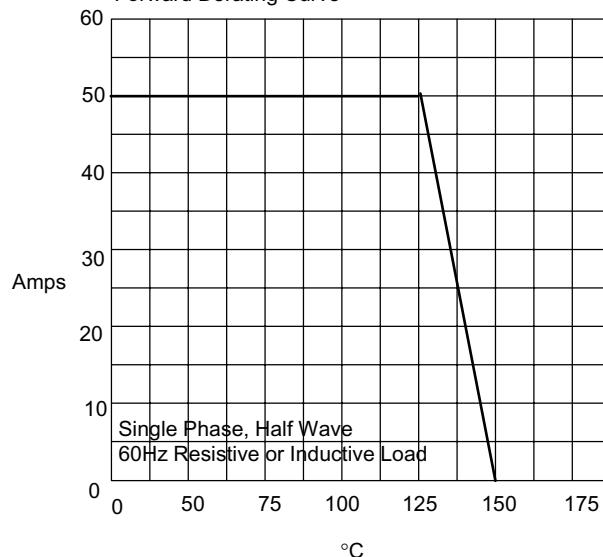
Micro Commercial Components

Figure 1  
Typical Forward Characteristics



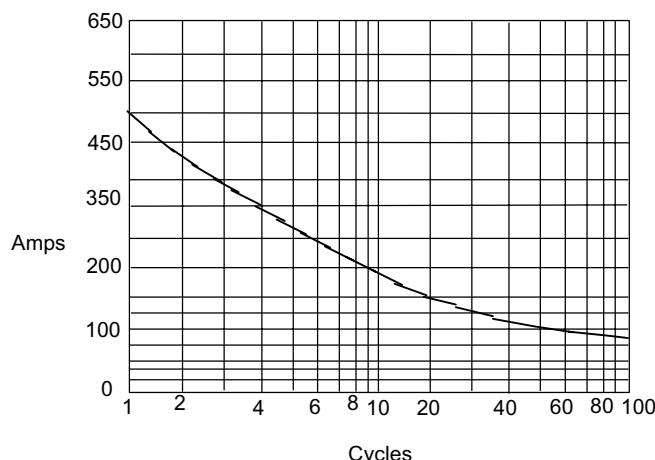
Instantaneous Forward Current - Amperesversus  
Instantaneous Forward Voltage - Volts

Figure 2  
Forward Derating Curve



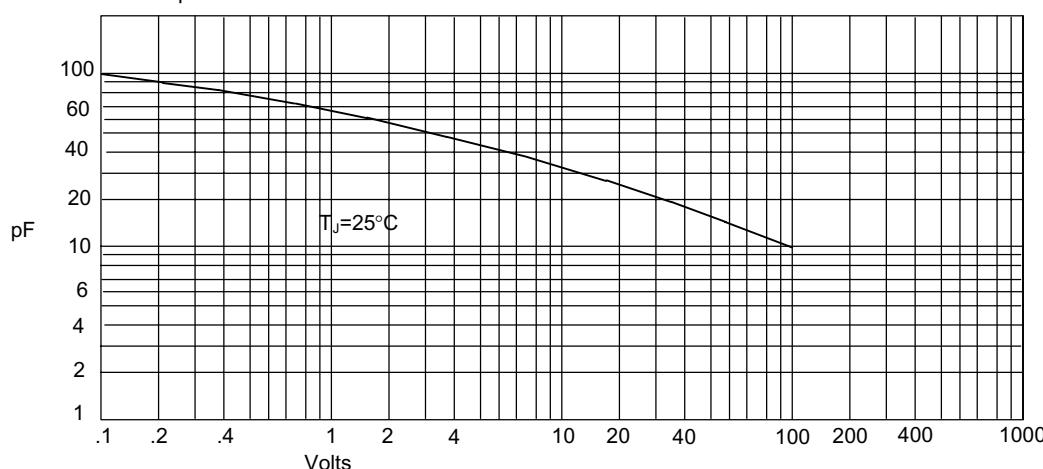
Average Forward Rectified Current - Amperesversus  
Case Temperature - °C

Figure 4  
Peak Forward Surge Current



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

Figure 3  
Junction Capacitance



Junction Capacitance - pFversus  
Reverse Voltage - Volts

**www.mccsemi.com**



TM

**Micro Commercial Components****Ordering Information :**

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

**\*\*\*IMPORTANT NOTICE\*\*\***

**Micro Commercial Components Corp.** reserves the right to make changes without further notice to any product herein to make corrections, modifications , enhancements , improvements , or other changes . **Micro Commercial Components Corp.** does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights ,nor the rights of others . The user of products in such applications shall assume all risks of such use and will agree to hold **Micro Commercial Components Corp.** and all the companies whose products are represented on our website, harmless against all damages.

**\*\*\*LIFE SUPPORT\*\*\***

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

**\*\*\*CUSTOMER AWARENESS\*\*\***

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. **MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources.** MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.

**[www.mccsemi.com](http://www.mccsemi.com)**