



Micro Commercial Components

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# SR302 THRU SR345

## 3 Amp Schottky Barrier Rectifier 20 - 45 Volts

### Features

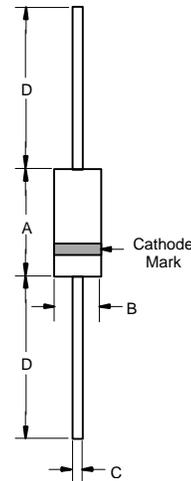
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Low Forward Voltage Drop and Low Switching Noise
- High Current Capability and High Surge Current Capability
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

### Maximum Ratings

- Operating Temperature: -50°C to +125°C
- Storage Temperature: -50°C to +125°C
- Maximum Thermal Resistance; 40°C/W Junction To Ambient

MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SR302	---	20V	14V	20V
SR303	---	30V	21V	30V
SR304	---	40V	28V	40V
SR345	---	45V	31.5V	45V

### DO-201AD



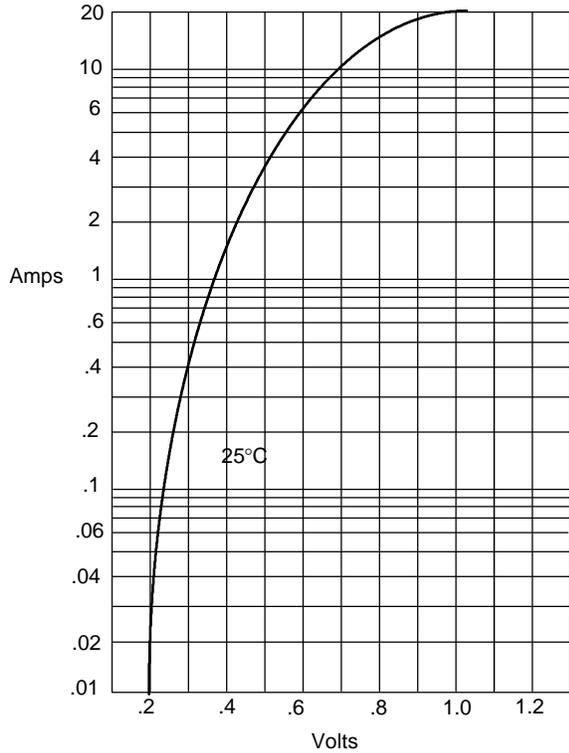
### Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	3.0A	$T_A = 85^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	80A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_F$	.50V	$I_{FM} = 3.0\text{A};$ $T_J = 25^\circ\text{C}(\text{Note } 2)$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	0.5mA 30mA	$T_J = 25^\circ\text{C}$ $T_J = 100^\circ\text{C}$
Typical Junction Capacitance	$C_J$	180pF	Measured at 1.0MHz, $V_R=4.0\text{V}$

Notes:1.High Temperature Solder Exemption Applied, see EU Directive Annex 7.  
2.Pulse test: Pulse width 300  $\mu\text{sec}$ , Duty cycle 1%

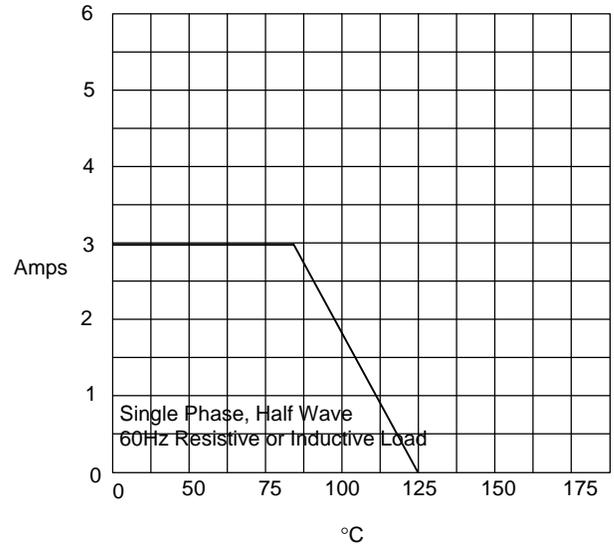
DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	.287	.374	7.30	9.50	
B	.189	.208	4.80	5.30	
C	.048	.052	1.20	1.30	
D	1.000	---	25.40	---	

Figure 1  
Typical Forward Characteristics



Instantaneous Forward Current - Amperes versus  
Instantaneous Forward Voltage - Volts

Figure 2  
Forward Derating Curve



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

Figure 3  
Junction Capacitance

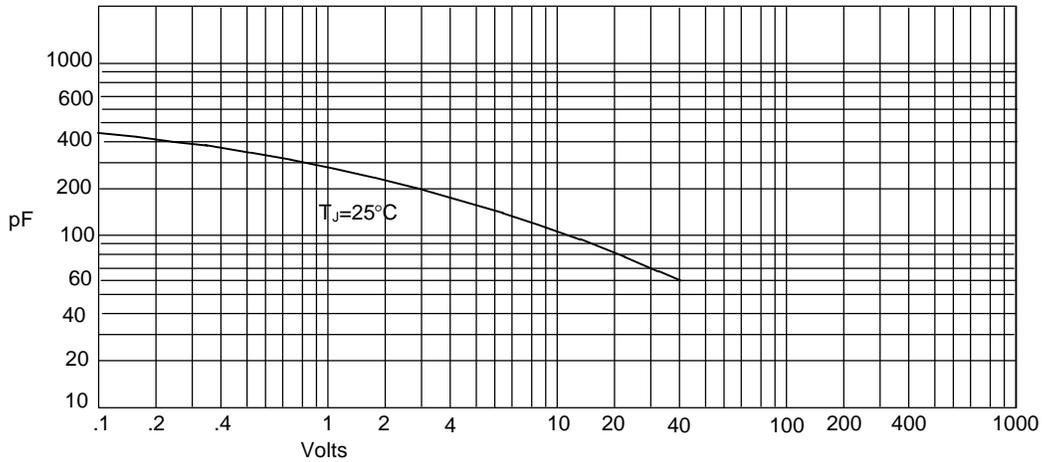
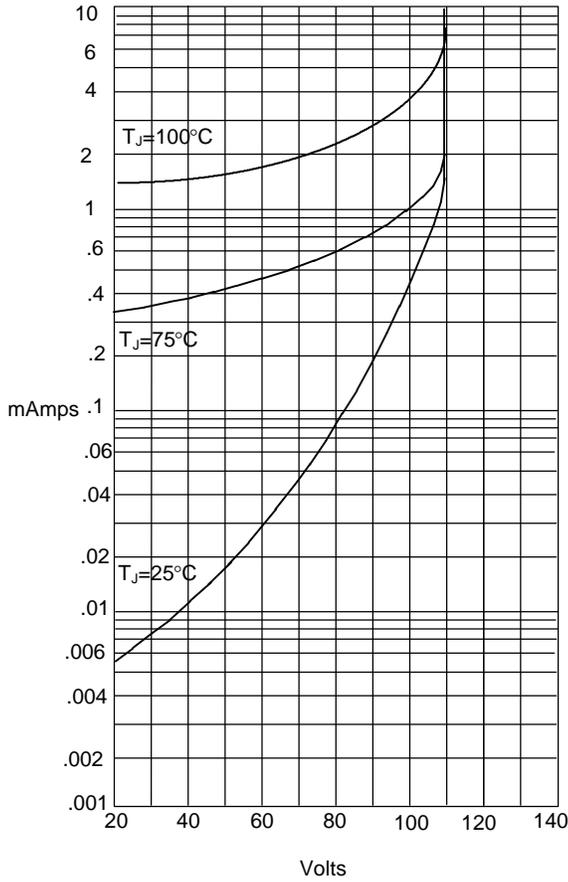
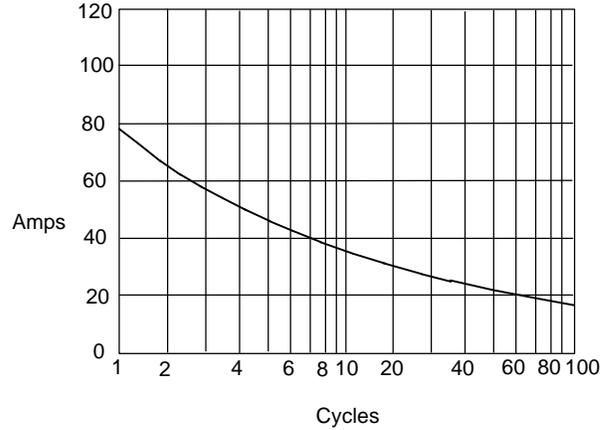


Figure 4  
Typical Reverse Characteristics



Instantaneous Reverse Leakage Current - MicroAmperes versus  
Percent Of Rated Peak Reverse Voltage - Volts

Figure 5  
Maximum Non-Repetitive Forward Surge Current



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

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



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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

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