

**Features**

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)
- Guard Ring Protection
- High Surge Current Capability
- Epoxy Meets UL 94 V-0 Flammability Rating
- For Use In Low Voltage, High Frequency Inverters, Free Wheeling, And Polarity Protection Applications
- Halogen Free Available Upon Request By Adding Suffix "-HF"

**Maximum Ratings**

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Maximum Thermal Resistance: 3 °C/W Junction to Case

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SR1045	SR1045	45V	31.5V	45V

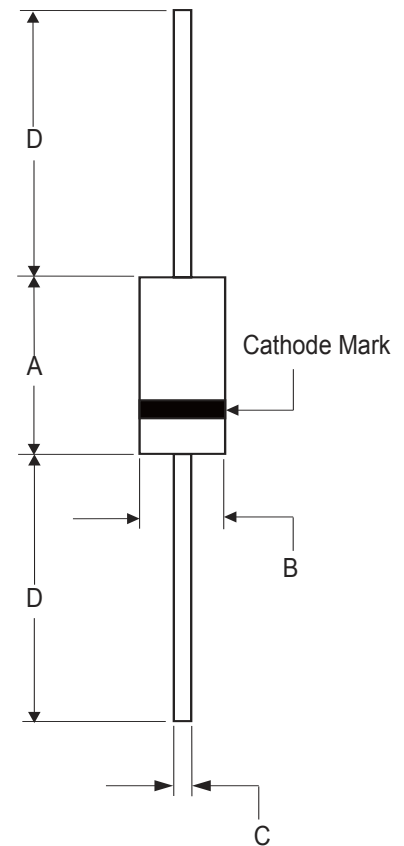
**Electrical Characteristics @ 25°C Unless Otherwise Specified**

Average Rectified Output Current	$I_O$	10A	$T_C=95^\circ\text{C}$
Maximum Surge Current	$I_{FSM}$	275A	8.3ms, Half Sine
Max Peak Forward Voltage	$V_{FM}$	0.55V	$I_{FM}=10\text{A}$
Max Peak Reverse Current	$I_{RM}$	0.1mA 20mA	$T_J=25^\circ\text{C}$ $T_J=100^\circ\text{C}$
Typical Junction Capacitance	$C_J$	450pF	$V_R=4.0\text{V}$ , $f=1.0\text{MHz}$

Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7a.

**10 Amp Schottky Barrier Rectifier  
45 Volts**

R-6



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.340	0.360	8.60	9.10	
B	0.340	0.360	8.60	9.10	
C	0.048	0.052	1.20	1.32	
D	1.000	-----	25.40	-----	

## Curve Characteristics

Fig. 1 - Forward Current Derating Curve

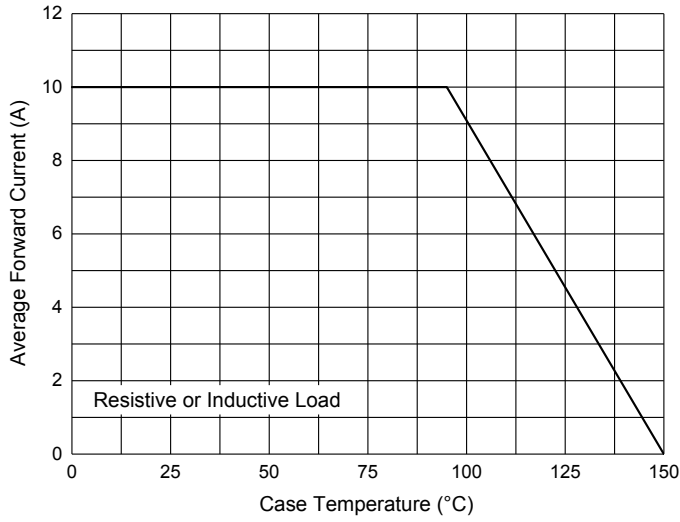


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

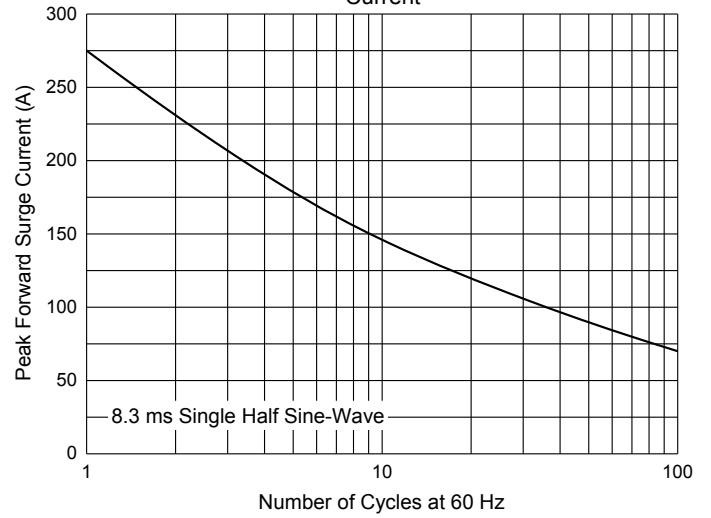


Fig. 3 - Typical Instantaneous Forward Characteristics

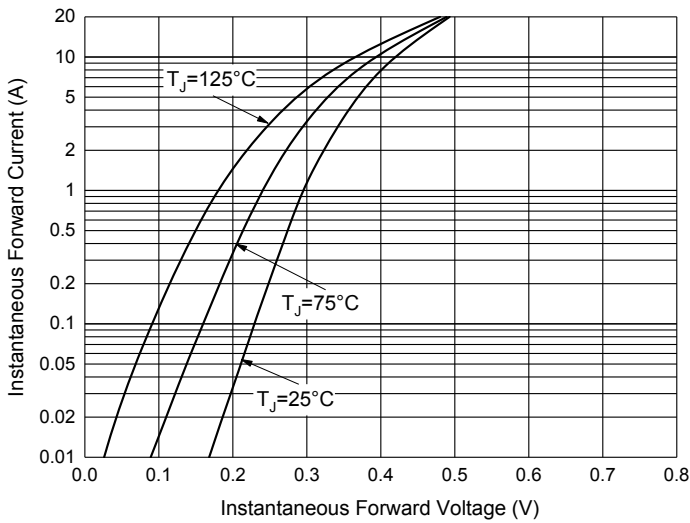
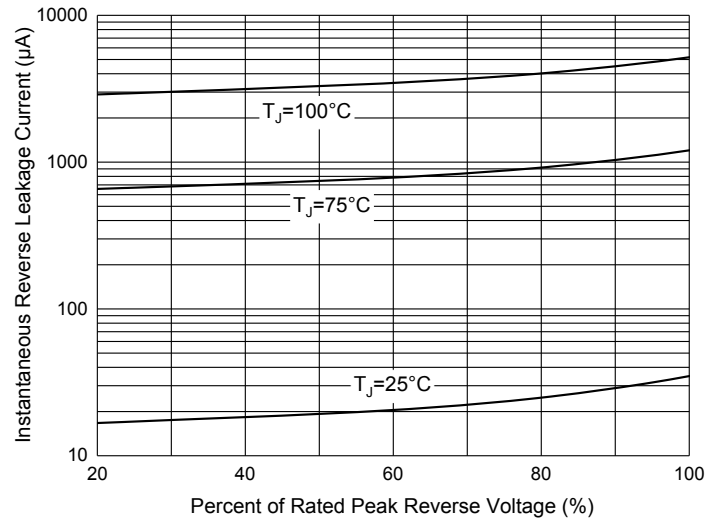


Fig. 4 - Typical Reverse Leakage Characteristics



## Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 500pcs/Reel
Part Number-AP	Ammo Packing: 450pcs/Ammo Box
Part Number-BP	Bulk: 200pcs/Box ;4.8Kpcs/Carton

Note : Adding "-HF" Suffix For Halogen Free, eg. Part Number-TP-HF

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