



Micro Commercial Components

Micro Commercial Components  
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# SR1045

## Features

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Guard Ring Protection
- High Surge Current Capability
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL rating 1
- For Use in Low Voltage, High Frequency Inverters, Free Wheeling, and Polarity Protection Applications

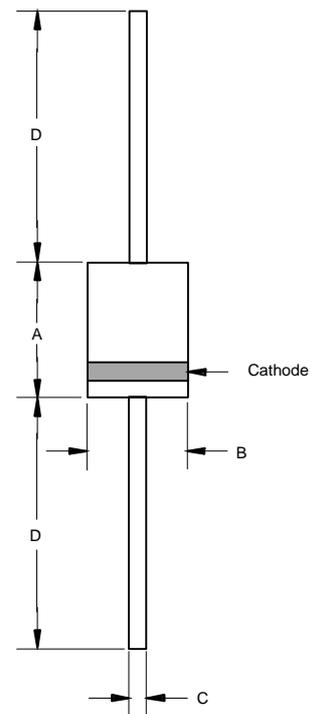
## Maximum Ratings

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

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

# 10 Amp Schottky Barrier Rectifier 45 Volts

## R-6



## 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	$V_{FM}$	.55V	$I_{FM} = 10A$
Max peak reverse current	$I_{RM}$	0.5mA 50mA	$T_J = 25^\circ\text{C}$ $T_J = 100^\circ\text{C}$
Typical junction capacitance	$C_J$	450pF	$V_R = 4.0V,$ $f=1.0MHz$

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

DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.340	.360	8.60	9.10	
B	.340	.360	8.60	9.10	
C	.048	.052	1.20	1.30	
D	1.000	---	25.40	---	

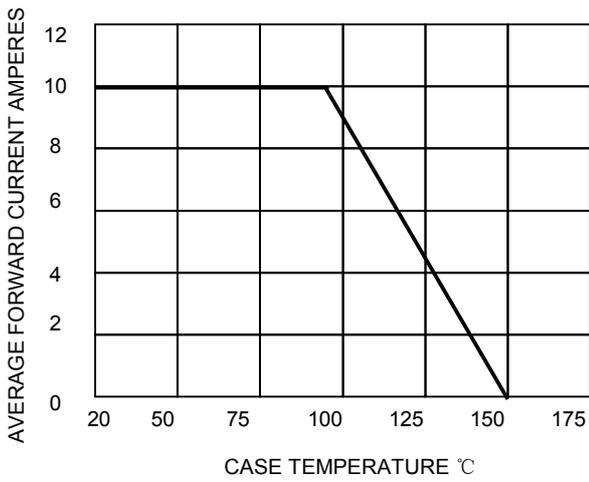


FIG.1-FORWARD CURRENT DERATING CURVE

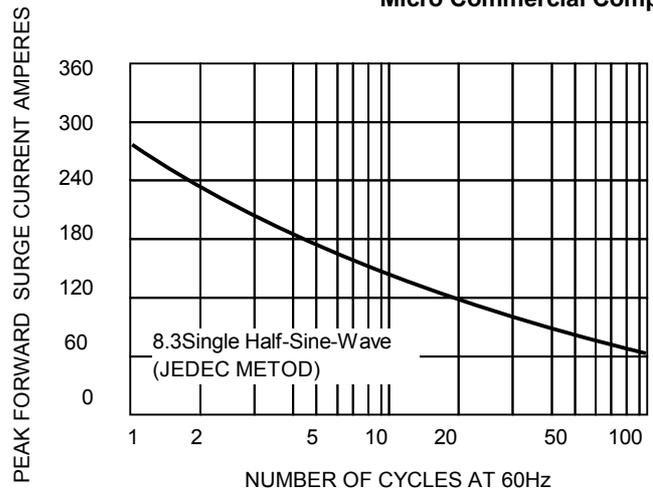


FIG.2-MAXIMUM NON-REPETITIVE SURGE

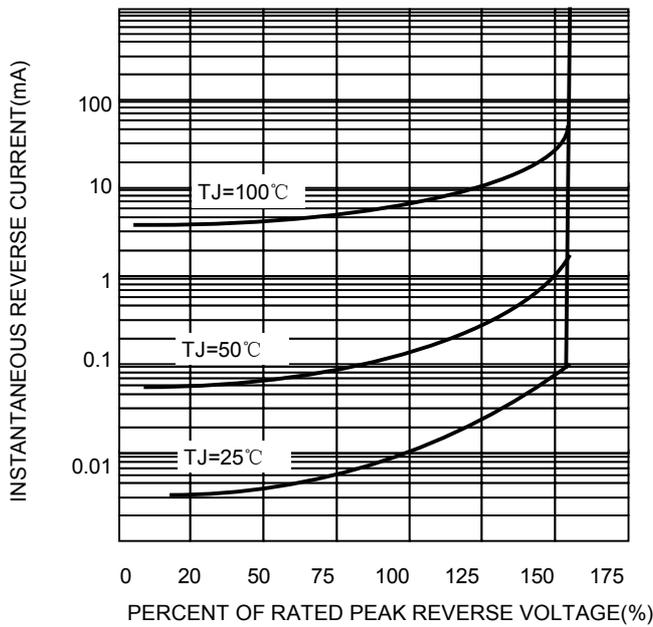


FIG.3-TYPICAL REVERSE CHARACTERISTICS

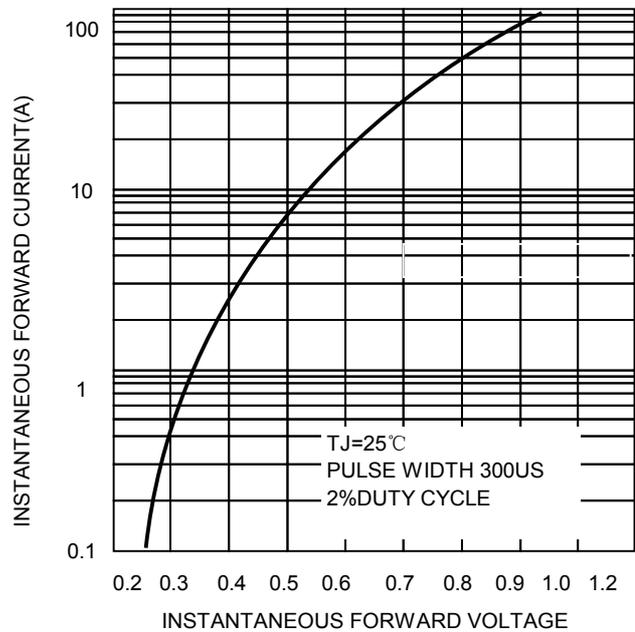


FIG.4-TYPICAL FORWARD CHARACTERISTICS

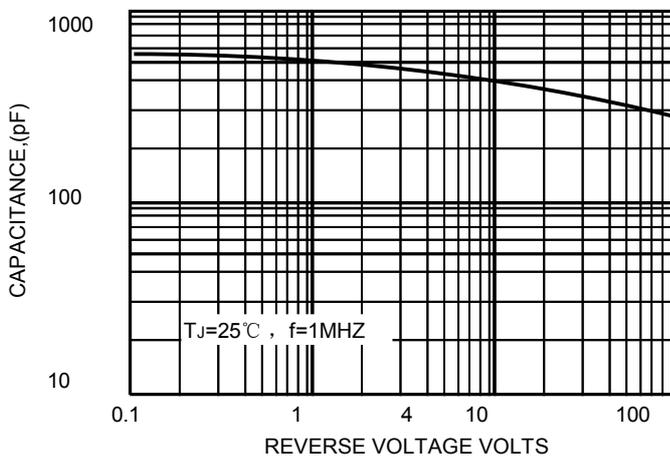


FIG.5-TYPICAL JUNCTION CAPACITANCE



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## Ordering Information

Device	Packing
(Part Number)-TP	Tape&Reel; 500pcs/Reel
(Part Number)-AP	Ammo Packing;450pcs/AmmoBox
(Part Number)-BP	Bulk;200pcs/Box

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