



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
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- 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 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

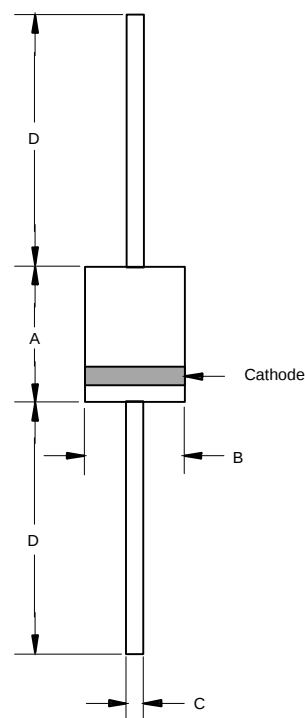
Electrical Characteristics @ 25°C Unless Otherwise Specified

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	$V_R = 4.0V$, $f=1.0\text{MHz}$

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

10 Amp Schottky Barrier Rectifier 45 Volts

R-6



DIM	INCHES		MM		NOTE
	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	---	

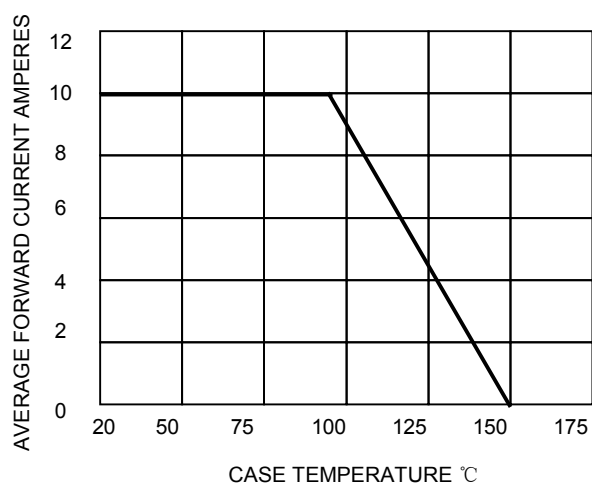


FIG.1-FORWARD CURRENT DERATING CURVE

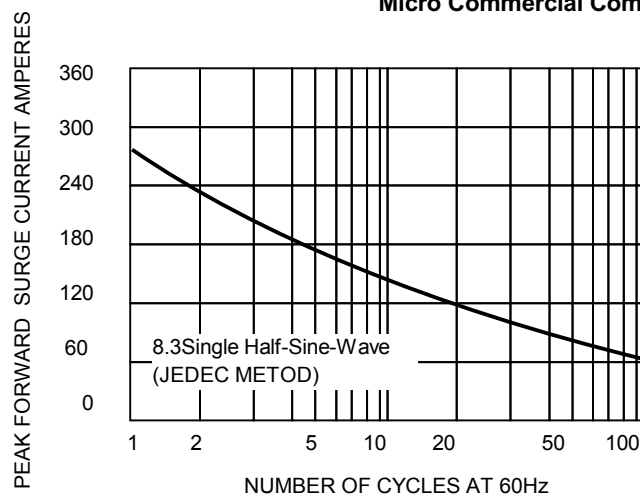


FIG.2-MAXIMUM NON-REPETITIVE SURGE

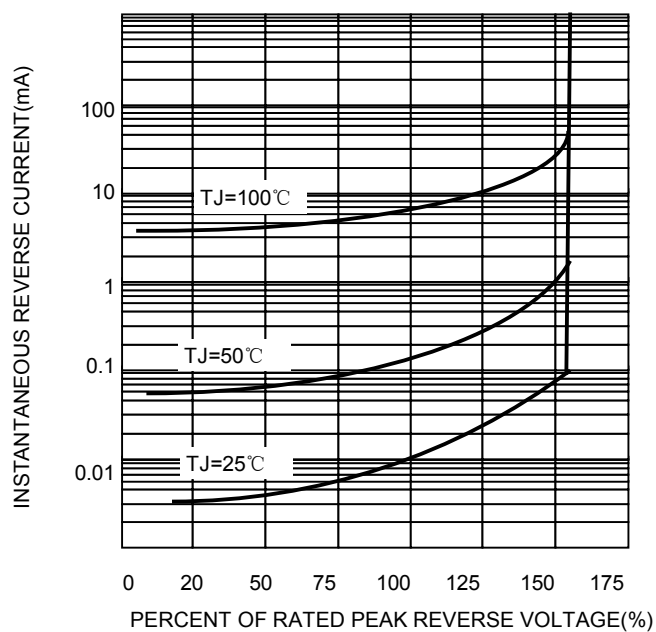


FIG.3-TYPICAL REVERSE CHARACTERISTICS

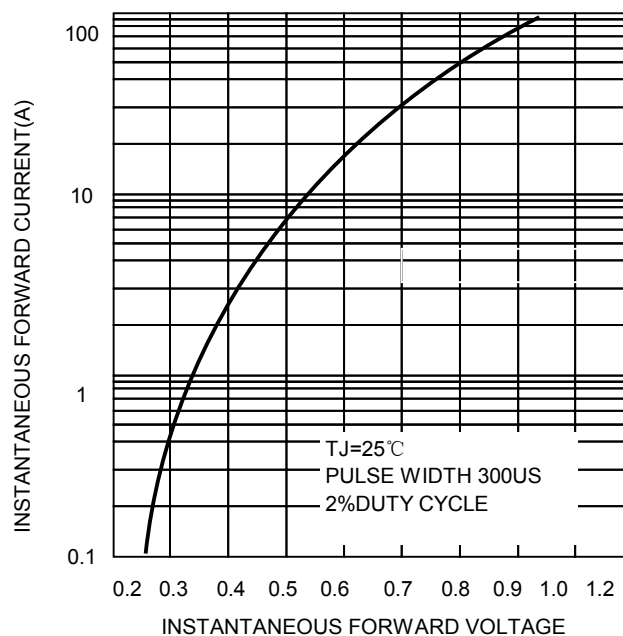


FIG.4-TYPICAL FORWARD CHARACTERISTICS

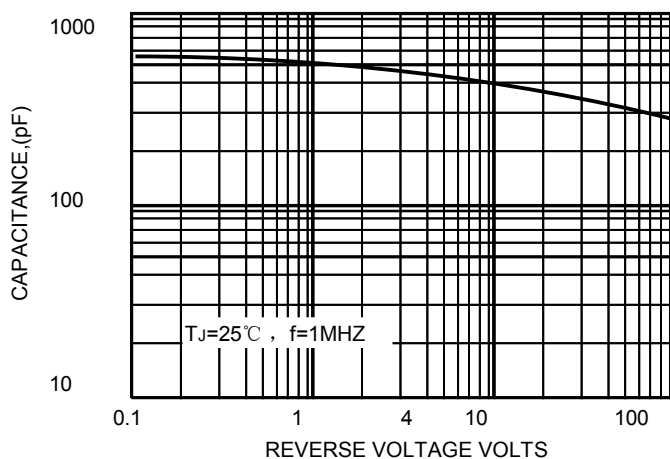


FIG.5-TYPICAL JUNCTION CAPACITANCE

Ordering Information :

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

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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