

Surface Mount Schottky Barrier Rectifier

multicomp PRO



Features:

- For surface mounted applications
- Metal-Semiconductor junction with guarding
- Epitaxial construction
- Very low forward voltage drop
- High current capability
- Plastic material has UL flammability classification 94V-0
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications.

Mechanical Data:

Case	: Molded Plastic
Polarity	: Colour band denotes cathode
Weight	: 0.002 ounces, 0.053 grams
Reverse Voltage	: 30 Volts
Forward Current	: 1 Ampere

Maximum Ratings and Electrical Characteristics:

Rating at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristics	Symbol	Values	Unit
Max. Recurrent Peak Reverse Voltage	V_{RRM}	30	V
Max. RMS Voltage	V_{RMS}	21	
Max. DC Blocking Voltage	V_{DC}	30	
Max. Average Forward Rectified Current $T_L = 100^\circ\text{C}$	$I_{(AV)}$	1	A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	30	
Peak Forward Voltage at 1A DC	V_F	0.55	V
Max. DC Reverse Current at $T_J = 25^\circ\text{C}$ Rated DC Blocking Voltage at $T_J = 125^\circ\text{C}$	I_R	1 10	μA
Typical Junction Capacitance (Note 1)	C_J	110	pF
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$	20	$^\circ\text{C/W}$
Operating Temperature Range	T_J	-55 to + 150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}		

Notes:

1. Measured at 1MHz and applied reverse voltage of 4V DC.
2. Thermal resistance junction to lead.
3. The typical data above is for reference only

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Ratings and Characteristic Curves

FIG. 1 - FORWARD CURRENT DERATING CURVE

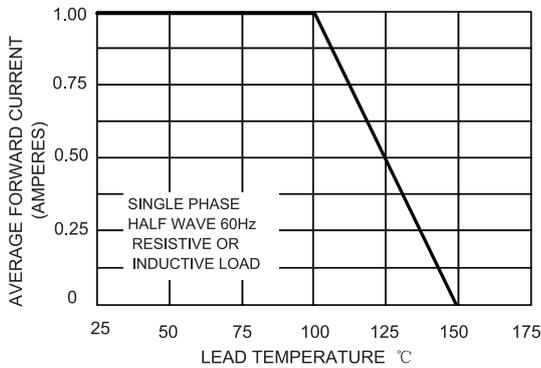


FIG. 2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

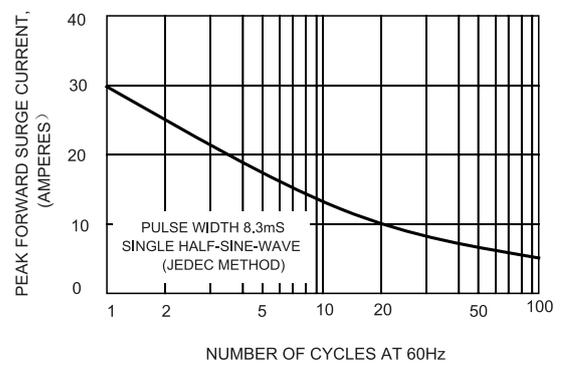


FIG.3-TYPICAL FORWARD CHARACTERISTICS

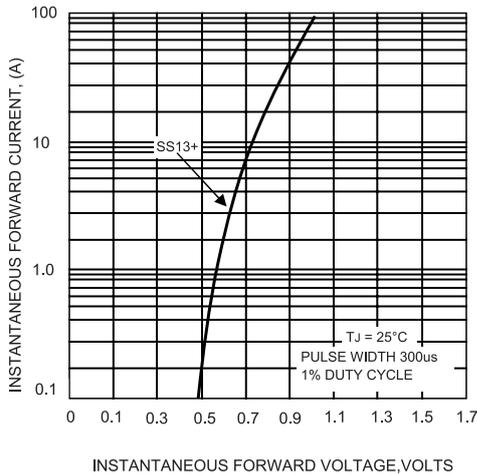


FIG.4-TYPICAL JUNCTION CAPACITANCE

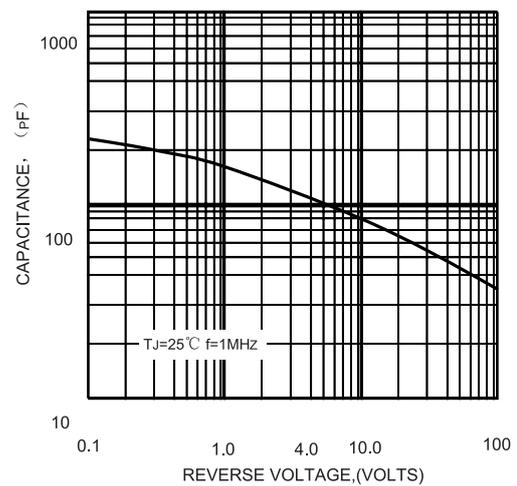
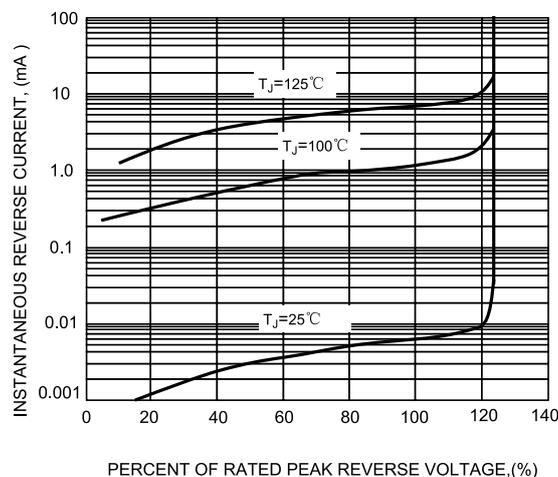


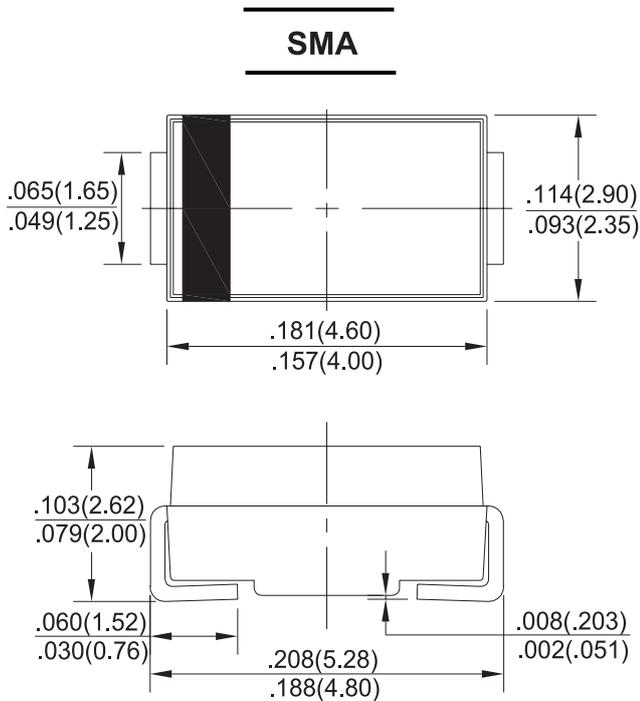
FIG.5-TYPICAL REVERSE CHARACTERISTICS



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Dimensions:



Dimensions : Inches (Millimetres)

Part Number Table

Description	Part Number
Surface Mount Schottky Barrier Rectifiers, 1A 30V SMA	SS13+

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