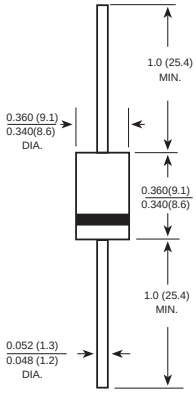
10SQ050

SCHOTTKY BARRIER RECTIFIERS

Reverse Voltage - 60 Volts Forward Current - 10 Amperes

R-6



Dimensions in inches and (millimeters)

FEATURES

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Low power loss,high efficiency
- Ultralow forward voltage,high current capability
- High forward surge current capability
- For use in low voltage,high frequency inverters free wheeling,and polarlity protection applications

MECHANICAL DATA

Case: R-6 molded plastic body
Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight:0.072 ounce, 2.05 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.
Single phase half-wave 60Hz,resistive or inductive load,for capacitive load current derate by 20%.

	SYMBOLS	10SQ050	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	60	VOLTS
Maximum RMS voltage	V_{RMS}	42	VOLTS
Maximum DC blocking voltage	V_{DC}	60	VOLTS
Maximum average forward rectified current	$I_{(AV)}$	10	Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	275	Amps
Maximum instantaneous forward voltage at 10A	V_F	0.55	Volts
Maximum DC reverse current T_J=25℃ at rated DC blocking voltage T_J=100℃	I_R	0.5 50	mA
Typical thermal resistance (NOTE 1)	$R_{\theta JC}$	3.0	℃/W
Operating junction temperature range	T_J	-50 to +200	℃
Storage temperature range	T_{STG}	-50 to +200	℃

Note:

1.P.C.B. mounted with 0.2x0.2”(5.0x5.0mm) copper pad areas

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RATINGS AND CHARACTERISTIC CURVES 10SQ050

FIG. 1- FORWARD CURRENT DERATING CURVE

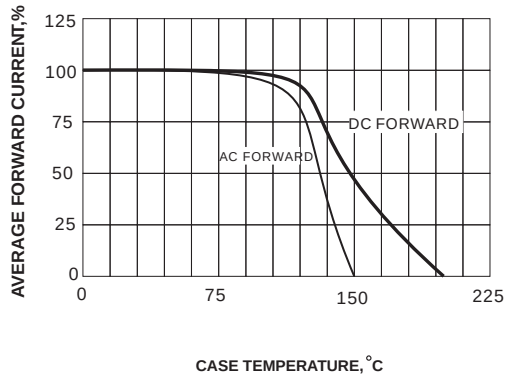


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

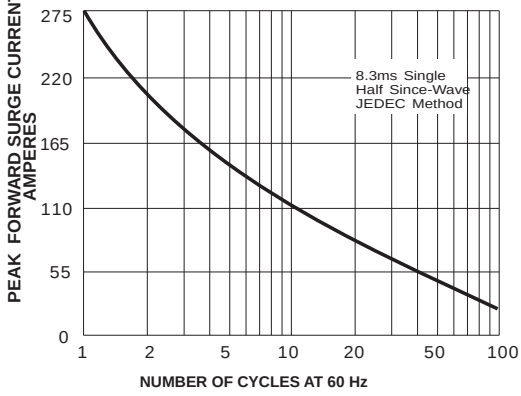


FIG. 3-TYPICAL REVERSE CHARACTERISTICS

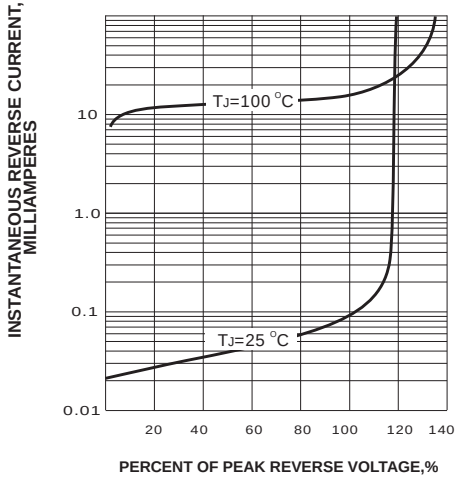
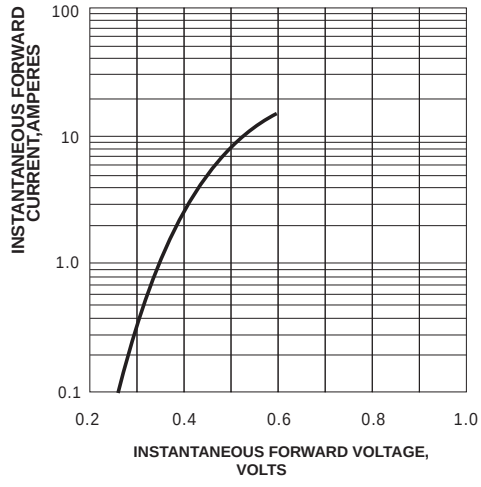


FIG. 4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



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