

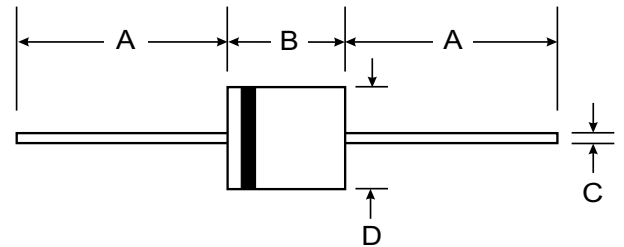
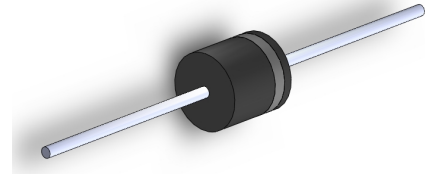
VOLTAGE RANGE: 30 - 100V
CURRENT: 10.0 A

Features

- Metal silicon rectifier, majority carrier conduction
- Guard ring for transient protection
- Low power loss, high efficiency
- High current capability, low VF
- High surge capacity
- Plastic package has UL flammability classification 94V-0
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

Mechanical Data

- Case: R-6 Molded Plastic
- Terminals: Axial Leads, Solderable per MIL-STD-202, Method 208
- Polarity: Color Band Indicates Cathode
- Approx. Weight: 1.7 grams
- Mounting Position: Any



R-6		
Dim	Min	Max
A	25.4	—
B	8.6	9.1
C	1.2	1.3
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	10SQ030	10SQ035	10SQ040	10SQ045	10SQ050	10SQ060	10SQ080	10SQ100	Unit
Maximum Recurrent Peak Reverse Voltage	VRRM	30	35	40	45	50	60	80	100	V
Maximum RMS Voltage	VRMS	21	24.5	28	31.5	35	42	56	70	V
Maximum DC Blocking Voltage	VDC	30	35	40	45	50	60	80	100	V
Maximum Average Forward Rectified Current @ $T_c=95^\circ\text{C}$	$I_{(AV)}$	10								A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load (JEDEC Method)	IFSM	275								A
Peak Forward Voltage at 10A DC (Note1)	VF	0.55			0.7		0.8			V
Maximum DC Reverse Current @ $T_j=25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_j=100^\circ\text{C}$	IR	0.5			50					mA
Typical Junction Capacitance (Note2)	CJ	450								PF
Typical Thermal Resistance (Note3)	RθJC	3.0								°C/w
Operating Temperature Range	TJ	-55 to +150								°C
Storage Temperature Range	TSTG	-55 to +150								°C

NOTES: 1. 300us Pulse Width, 2% Duty Cycle.
 2. Measured at 1.0 MHz and applied reverse voltage of 4.0VDC.
 3. Thermal Resistance Junction to Case.



RATING AND CHARACTERISTIC CURVES 10SQ030 thru 10SQ100

FIG.1-FORWARD CURRENT DERATING CURVE

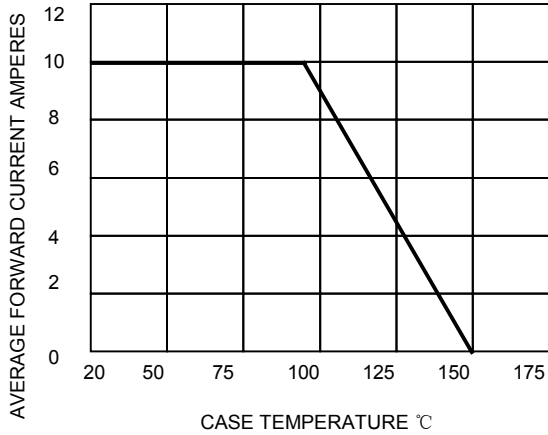


FIG.2-MAXIMUM NON-REPETITIVE SURGE

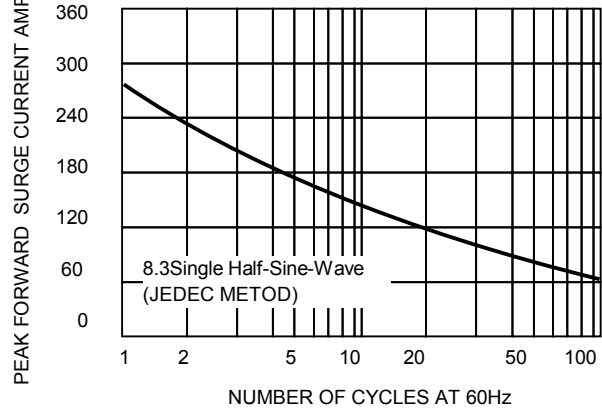


FIG.3-TYPICAL REVERSE CHARACTERISTICS

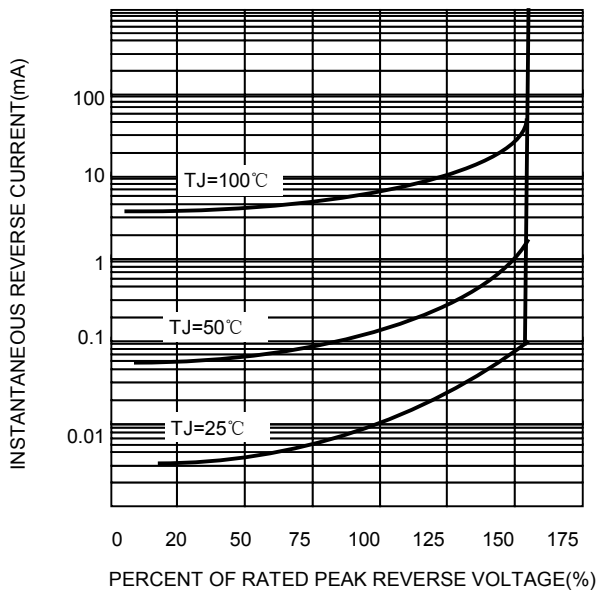


FIG.4-TYPICAL FORWARD CHARACTERISTICS

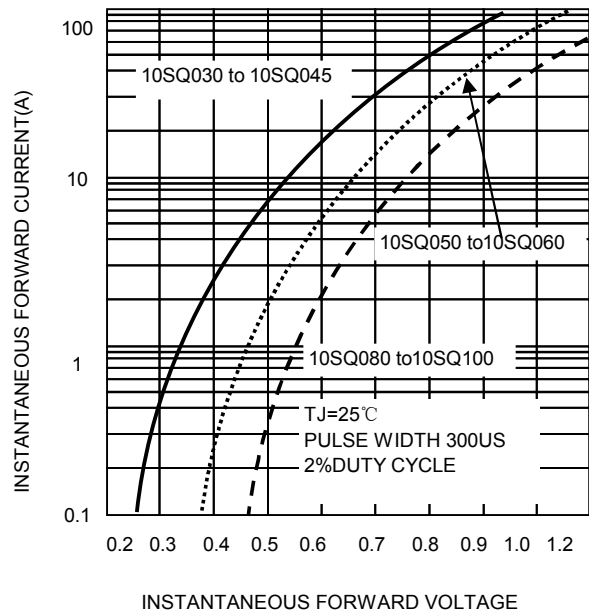


FIG.5-TYPICAL JUNCTION CAPACITANCE

