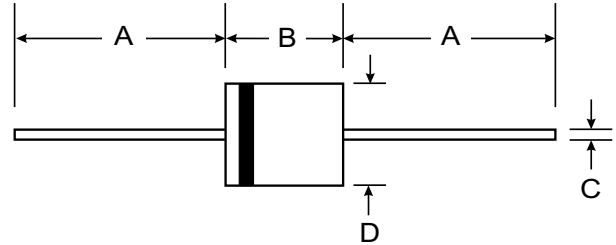
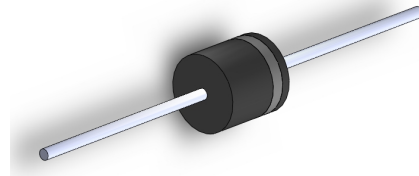


VOLTAGE RANGE: 30 - 100V
CURRENT: 10.0 A

Features

- Metalofsiliconrectifier , majoritycarrierconduction
- Guardringfortransient protection
- Lowpowerloss,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



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

Mechanical Data

- Case: JEDEC R-6 molded plastic
- Polarity: Color band denotes cathode
- Weight: 0.07 ounces , 2.1 grams
- Mounting position: Any



Maximum Ratings and Electrical Characteristics T_A = 25°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	10SQ06	10SQ080	10SQ100	Unit
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	30	35	40	45	50	60	80	100	V
Maximum RMS Voltage	V _{RMS}	21	24.5	28	31.5	35	42	56	70	V
Maximum DC Blocking Voltage	V _{DC}	30	35	40	45	50	60	80	100	V
Maximum Average Forward Rectified Current @ T _c =95 °C	I _(AV)	10								A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load (JEDEC Method)	I _{FSM}	275								A
Peak Forward Voltage at 10A DC (Note1)	V _F	0.55			0.7		0.8			V
Maximum DC Reverse Current @ T _j =25°C at Rated DC Blocking Voltage @ T _j =100°C	I _R	0.5			50					mA
Typical Junction Capacitance (Note2)	C _J	450								PF
Typical Thermal Resistance (Note3)	R _{θJC}	3.0								°C/w
Operating Temperature Range	T _J	-55 to +150								°C
Storage Temperature Range	T _{STG}	-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

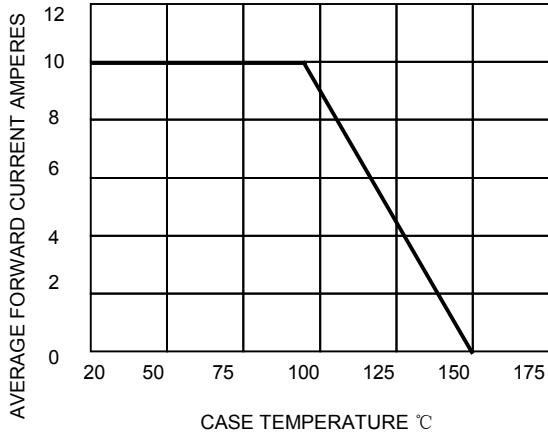


FIG.2-MAXIMUM NON-REPETITIVE SURGE

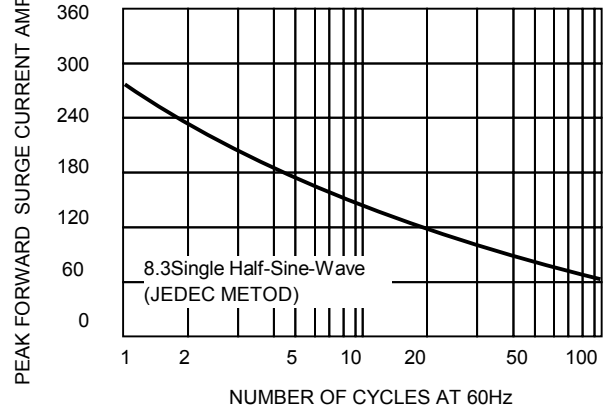


FIG.3-TYPICAL REVERSE CHARACTERISTICS

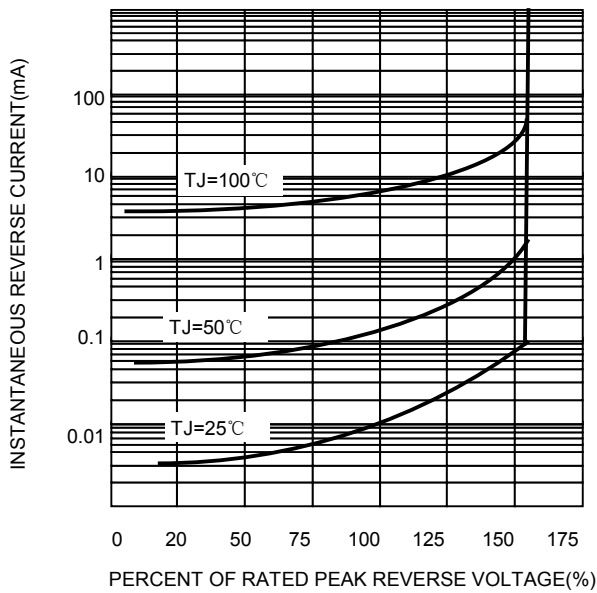


FIG.4-TYPICAL FORWARD CHARACTERISTICS

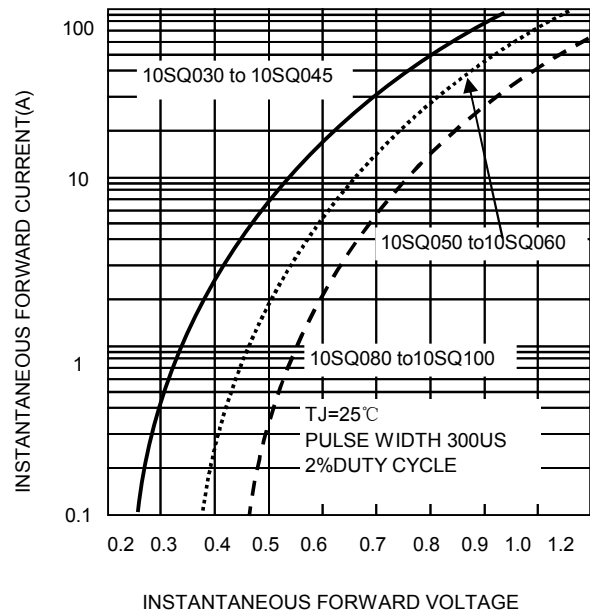


FIG.5-TYPICAL JUNCTION CAPACITANCE

