

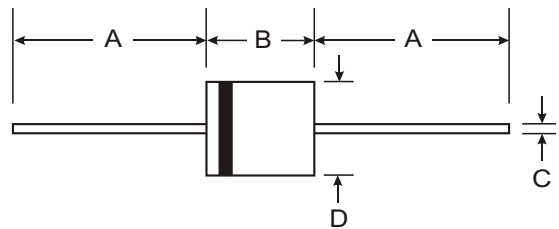
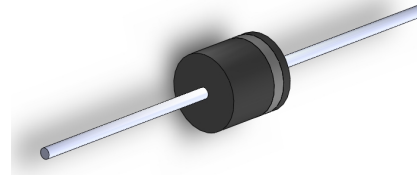
**VOLTAGE RANGE: 30 - 100V**  
**CURRENT: 10.0 A**

### Features

- Metal of 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: JEDEC R-6 molded plastic
- Polarity: Colorbanddenotes cathode
- Weight: 0.07ounces , 2.1grams
- Mounting position: Any



R-6		
Dim	Min	Max
A	25.4	—
B	8.6	9.1
C	1.2	1.3
D	8.6	9.1
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@Tc=95 °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 @Tj=25°C at Rated DC Bolcking Voltage @Tj=100°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%Dudy 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

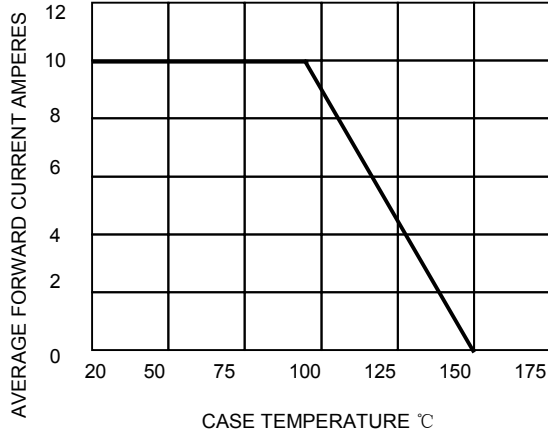


FIG.2-MAXIMUM NON-REPETITIVE SURGE

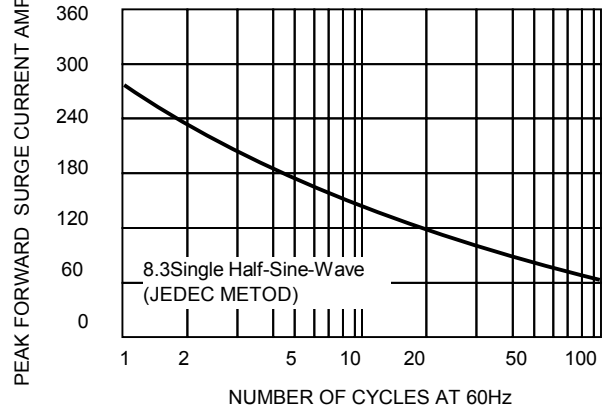


FIG.3-TYPICAL REVERSE CHARACTERISTICS

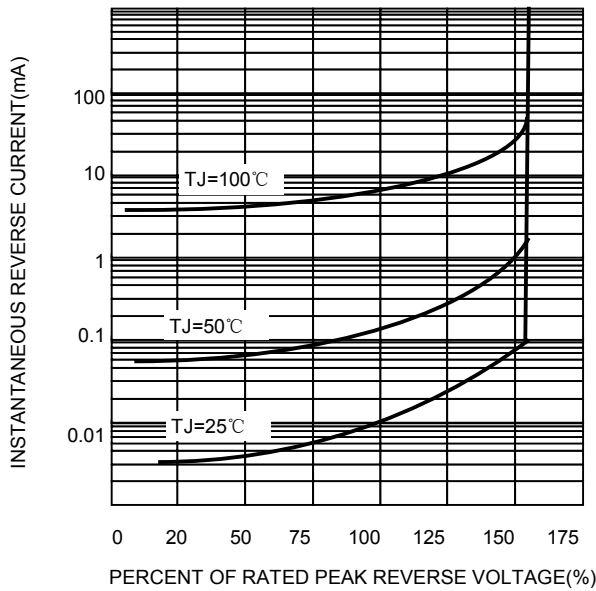


FIG.4-TYPICAL FORWARD CHARACTERISTICS

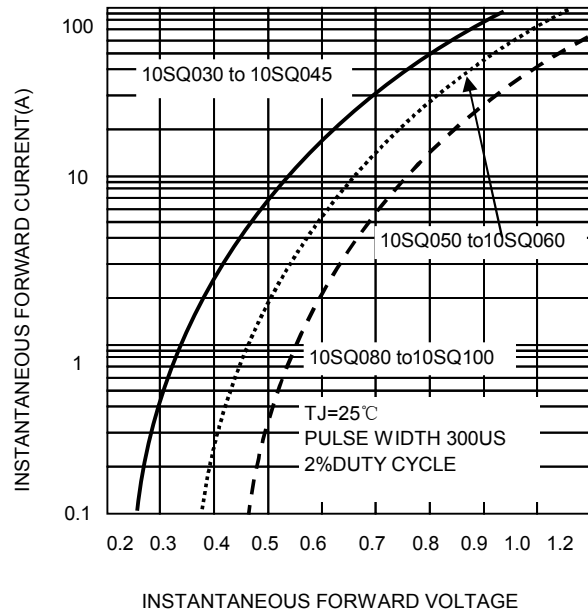


FIG.5-TYPICAL JUNCTION CAPACITANCE

