

**PHOTOVOLTAIC SOLAR CELL
PROTECTION SCHOTTKY RECTIFIER**

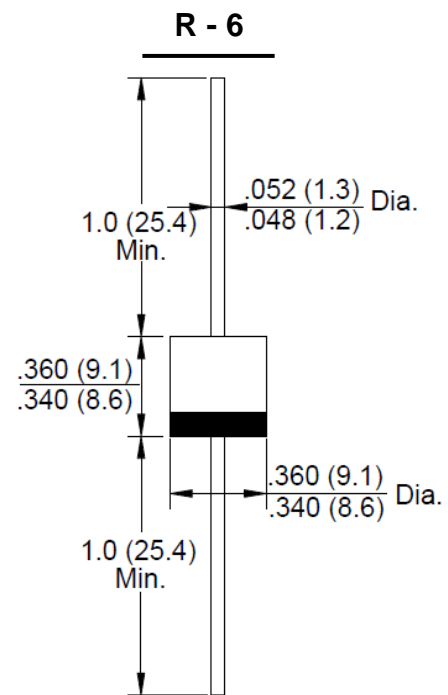
**REVERSE VOLTAGE 40 - 45 Volts
FORWARD CURRENT - 20.0 Amperes**

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
- For use in low voltage,high frequency inverters,free wheeling,and polarity protection applications

MECHANICAL DATA

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



Dimensions in inches and (millimeters)

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	20SQ040	20SQ045	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	40	45	V
Maximum RMS Voltage	VRMS	28	31.5	V
Maximum DC Blocking Voltage	VDC	40	45	V
Maximum Average Forward Rectified Current @Tc=170 °C	I(AV)	20		A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load(JEDEC Method)	IFSM	450		A
Peak Forward Voltage at 20A DC(Note1)	VF	0.53		V
Maximum DC Reverse Current @Tj=25°C	IR	0.5		mA
at Rated DC Blocking Voltage @Tj=125°C		80		
Typical Thermal Resistance (Note2)	RθJC	2.5		°C/W
Operating Temperature Range (@Vdc Blocking Voltage)	TJ	-55 to+200		°C
Storage Temperature Range	TSTG	-55 to+200		°C

NOTES:1.300us Pulse Width, 2%Duty Cycle.

2.Thermal Resistance Junction to case without heatsink.

RATING AND CHARACTERISTIC CURVES
20SQ040 THRU 20SQ045



FIG.1-FORWARD CURRENT DERATING CURVE

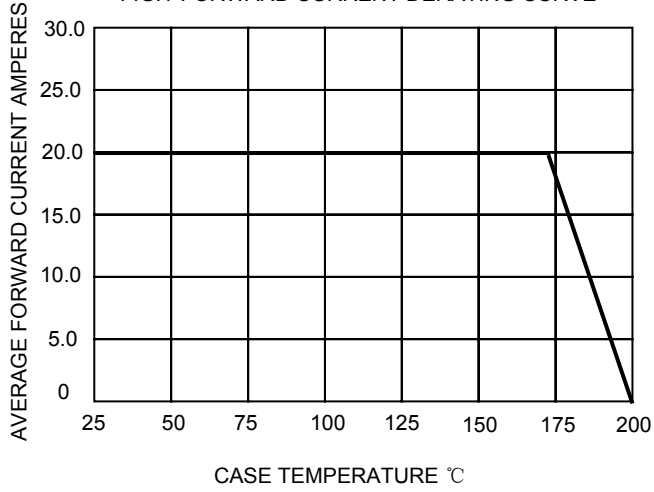


FIG.2-MAXIMUM NON-REPETITIVE SURGE

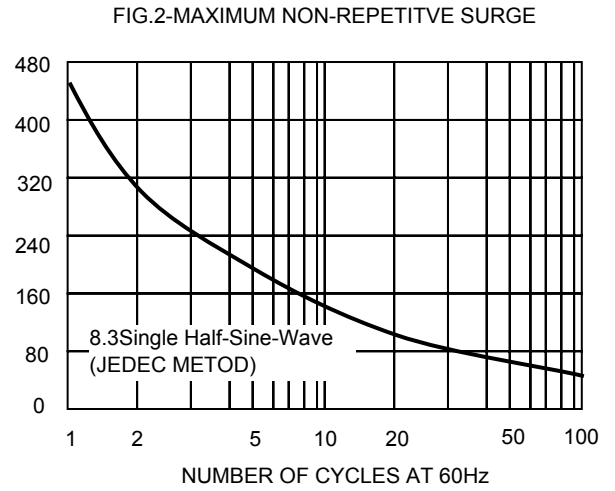


FIG.3-TYPICAL REVERSE CHARACTERISTICS

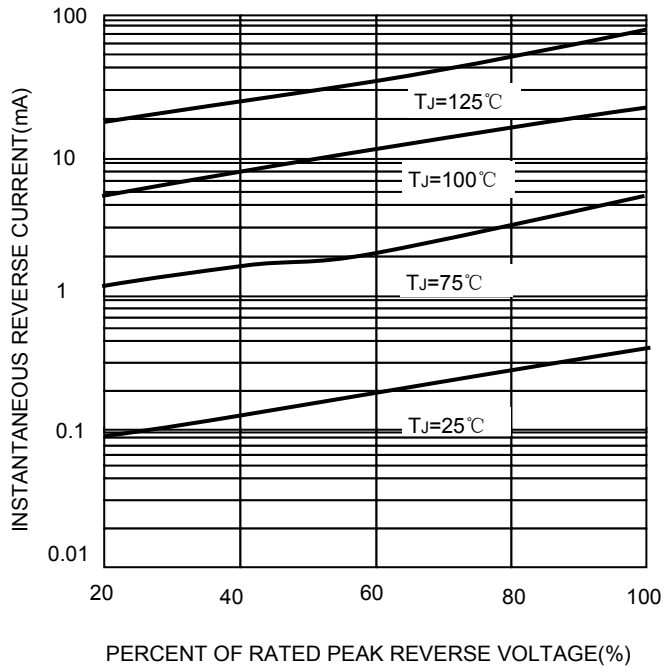
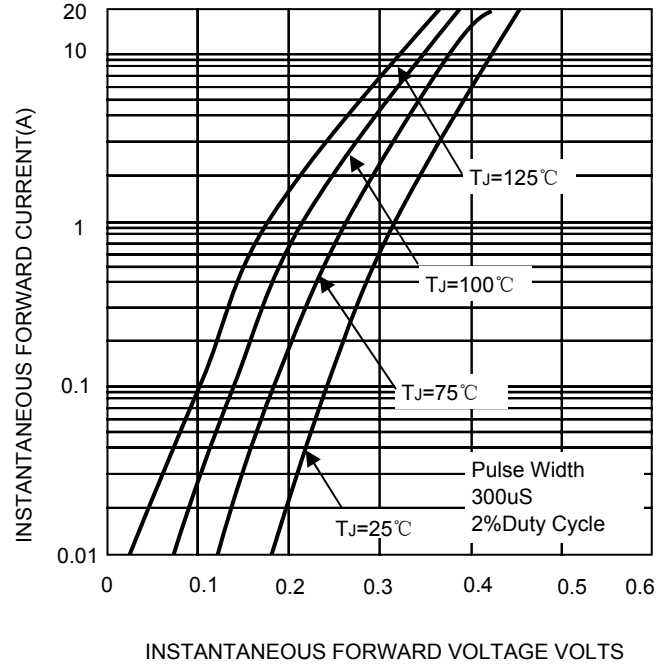


FIG.4-TYPICAL FORWARD CHARACTERISTICS



The curve graph is for reference only, can't be the basis for judgment(曲线图仅供参考)!



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