

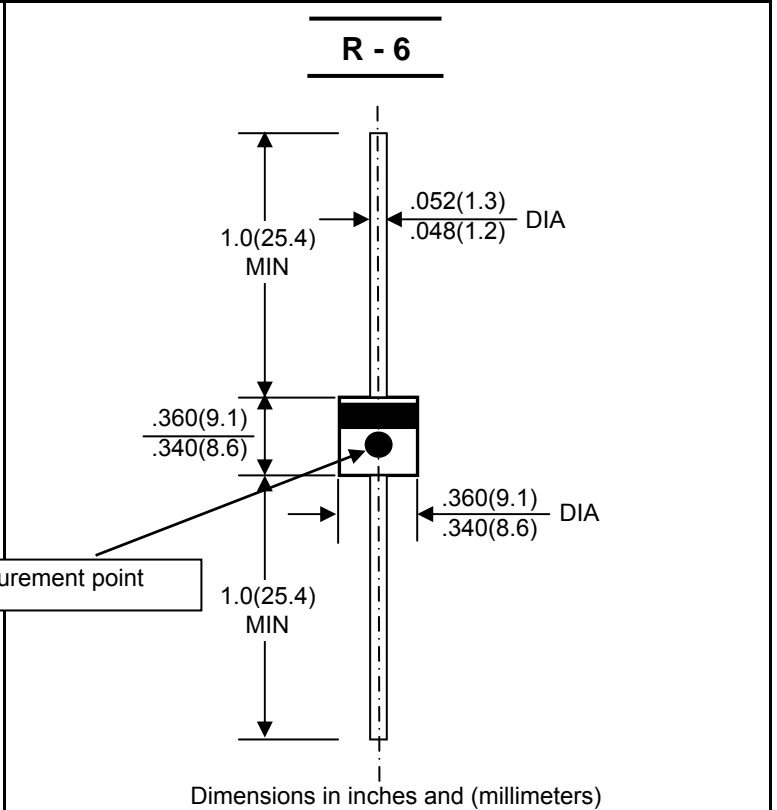
PHOTOVOLTAIC SOLAR CELL PROTECTION SCHOTTKY RECTIFIER	REVERSE VOLTAGE - 45 Volts FORWARD CURRENT - 15.0 Amperes
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FEATURES

- 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



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	15SQ045H	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	45	V
Maximum RMS Voltage	VRMS	31.5	V
Maximum DC Blocking Voltage	VDC	45	V
Maximum Average Forward Rectified Current @Tc=95 °C	I(AV)	15	A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load(JEDEC Method)	IFSM	200	A
Peak Forward Voltage at 15A DC(Note1)	VF	0.55	V
Maximum DC Reverse Current @Tj=75°C at Rated DC Bolcking Voltage @Tj=100°C	IR	0.5 50	mA
Typical Junction Capacitance (Note2)	CJ	450	pF
Typical Thermal Resistance (Note2)	Rθjc	3.5	°C/W
Operating Temperature Range	TJ	-55 to+200	°C
Storage Temperature Range	TSTG	-55 to+200	°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.

FIG.1-FORWARD CURRENT DERATING CURVE

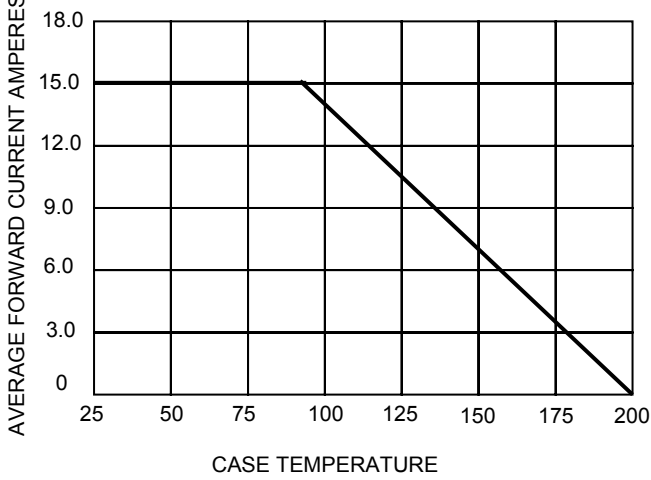


FIG.2-MAXIMUM NON-REPETITIVE SURGE

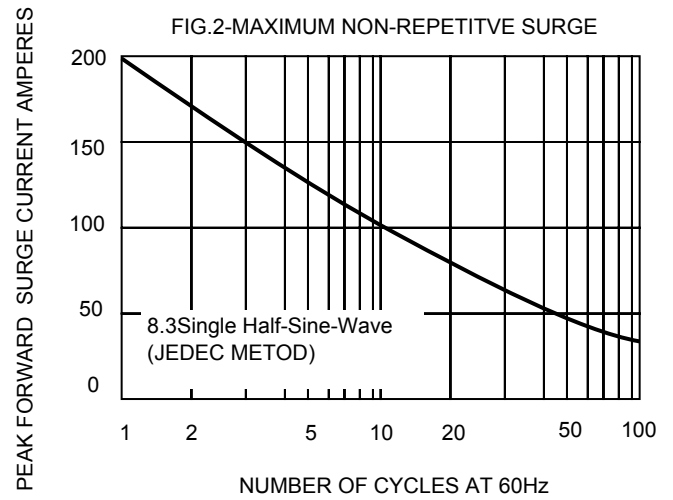


FIG.3-TYPICAL REVER CHARACTERISTICS

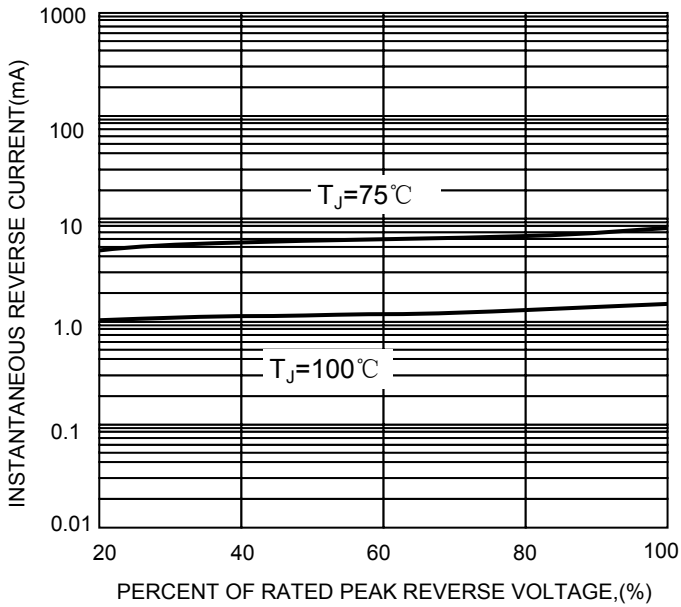


FIG.4-TYPICAL FORWARD CHARACTERISTICS

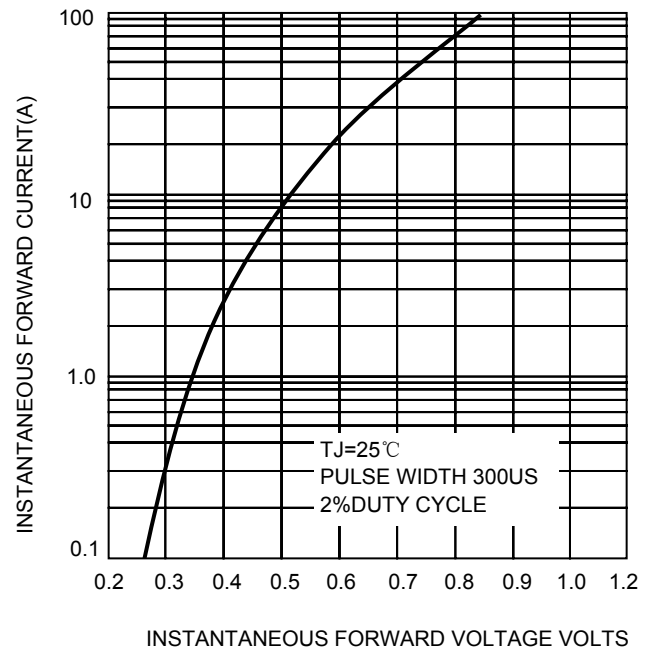


FIG.5-TYPICAL JUNCTION

