

PHOTOVOLTAIC SOLAR CELL PROTECTION SCHOTTKY RECTIFIER

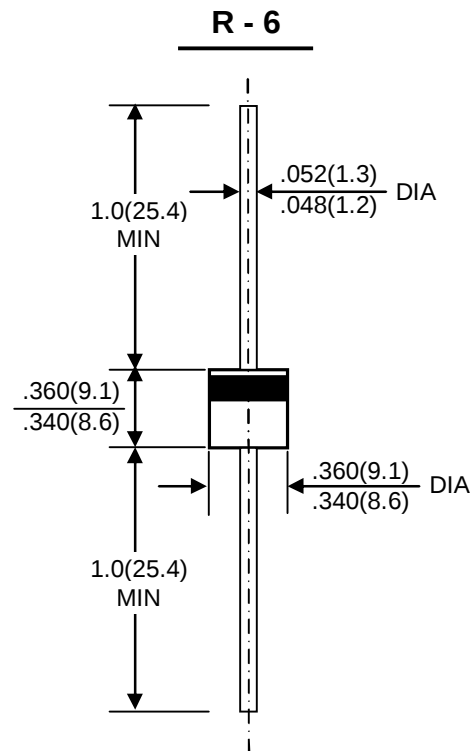
REVERSE VOLTAGE - 30 to 100Volts
FORWARD CURRENT - 25.0 Amperes

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



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	25PV030	25PV040	25PV050	25PV060	25PV080	25PV100	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	30	40	50	60	80	100	V
Maximum RMS Voltage	VRMS	21	28	35	42	56	70	V
Maximum DC Blocking Voltage	VDC	30	40	50	60	80	100	V
Maximum Average Forward Rectified Current @TL=95 ℃	I(AV)	25						A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load(JEDEC Method)	IFSM	400						A
Peak Forward Voltage at 25A DC(Note1)	VF	0.55		0.7		0.8		V
Maximum DC Reverse Current @Tj=25℃ at Rated DC Blocking Voltage @Tj=100℃	IR	0.5 50						mA
Typical Thermal Resistance (Note2)	RθJL	1.8						℃/W
Operating Temperature Range (@Vdc Blocking Voltage)	TJ	-55 to+200						℃
Storage Temperature Range	TSTG	-55 to+200						℃

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

2.Thermal Resistance Junction to lead / terminal at a distance 1mm from case.

FIG.1-FORWARD CURRENT DERATING CURVE

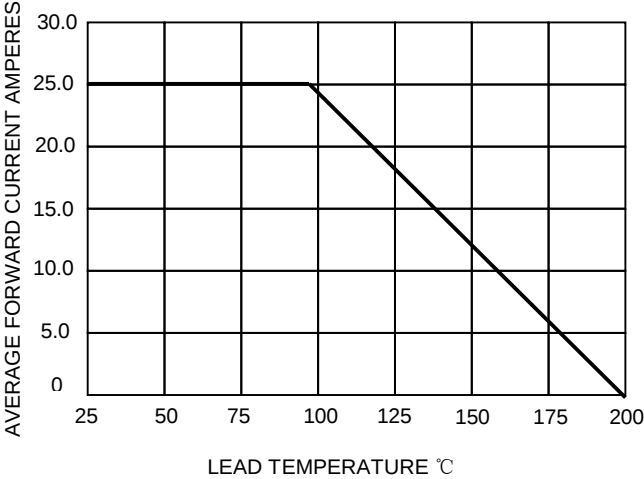


FIG.2-MAXIMUM NON-REPETITIVE SURGE

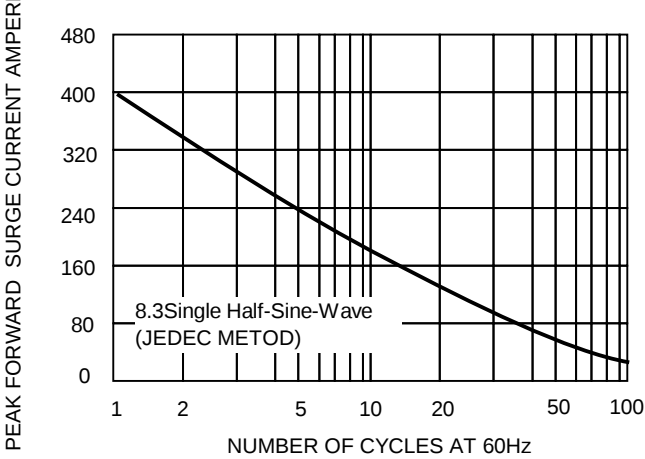


FIG.3-TYPICAL REVERSE CHARACTERISTICS

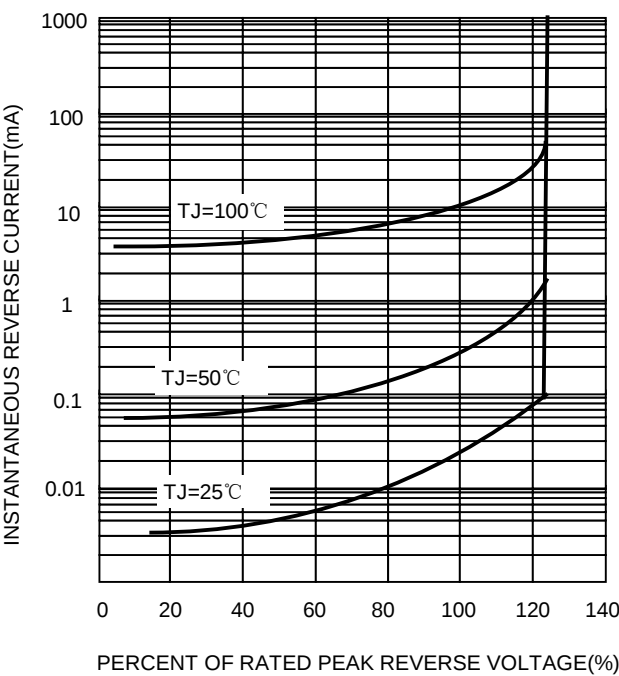


FIG.4-TYPICAL FORWARD CHARACTERISTICS

