

**PHOTOVOLTAIC SOLAR CELL
PROTECTION SCHOTTKY RECTIFIER**

REVERSE VOLTAGE - **40 to 45Volts**
FORWARD CURRENT - **20 Amperes**

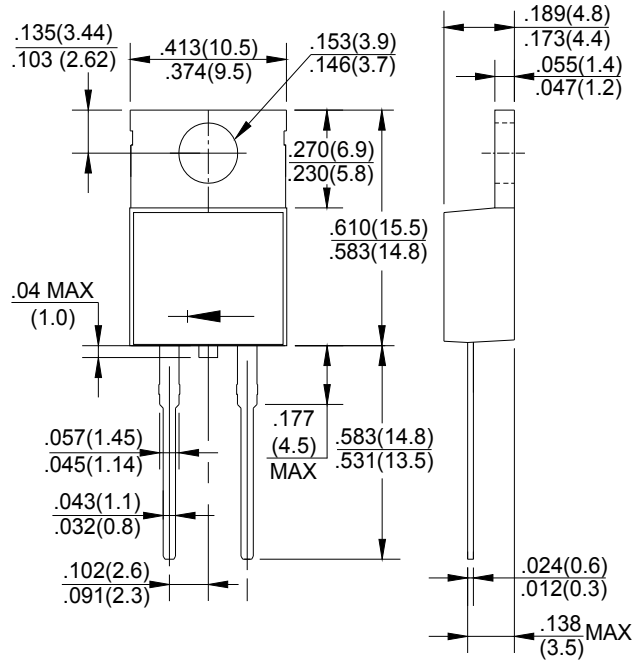
FEATURES

- 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
- 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: TO-220AC molded plastic
- Polarity: As marked on the body
- Mounting position :Any

TO-220AC



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	SDA2040A	SDA2045A	UNIT
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	40	45	V
Maximum RMS Voltage	V _{RMS}	28	31.5	V
Maximum DC Blocking Voltage	V _{DC}	40	45	V
Maximum Average Forward Rectified Current (See Fig.1) @T _c =95 °C	I _(AV)	20		A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I _{FSM}	300		A
Peak Forward Voltage at 20A DC(Note1)	V _F	0.62		V
Maximum DC Reverse Current at Rated DC Blocking Voltage @T _J =25°C @T _J =125°C	I _R	0.5 50		mA
Typical Thermal Resistance(Note2)	R _{θjc}	1.5		°C/W
Operating Temperature Range	T _J	-55 to +200		°C
Storage Temperature Range	T _{STG}	-55 to +200		°C

NOTES:1.300us pulse width,2% duty cycle.

2.Thermal Resistance Junction to case(without heatsink).

3.The typical data above is for reference only(典型值仅供参考).

FIG. 1 – FORWARD CURRENT DERATING CURVE

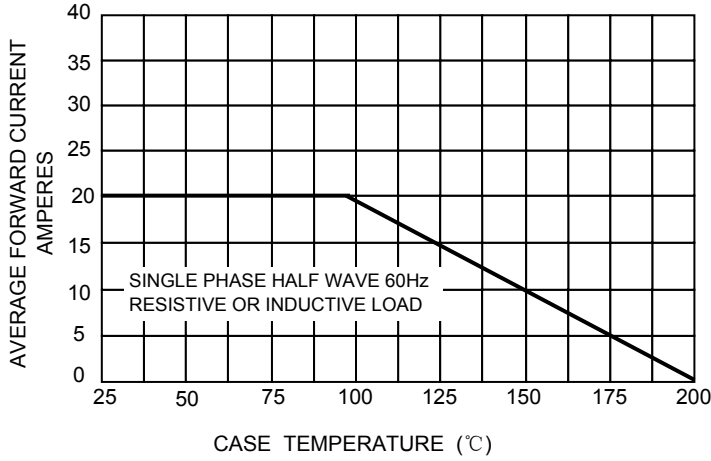


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

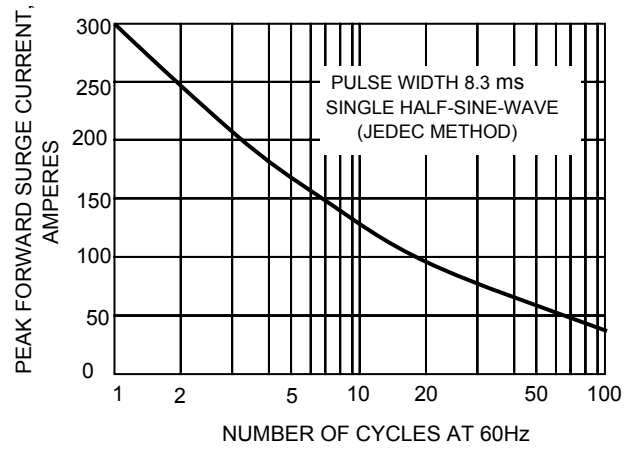


FIG.3-TYPICAL REVERSE CHARACTERISTICS

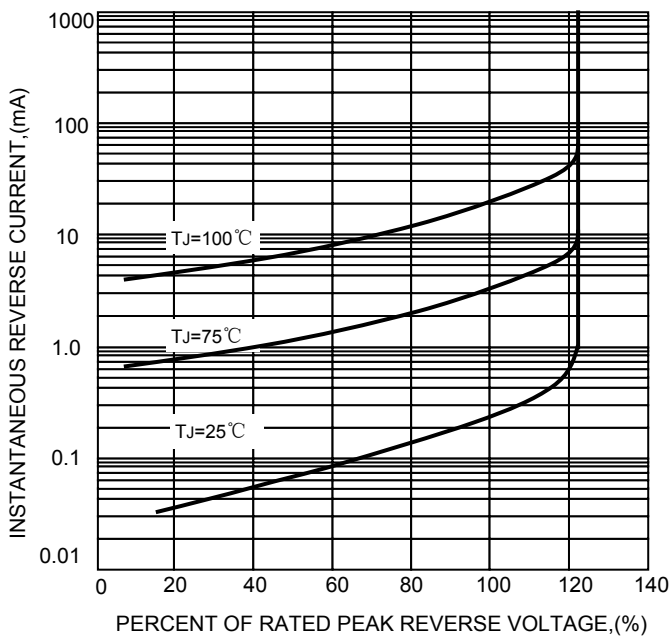
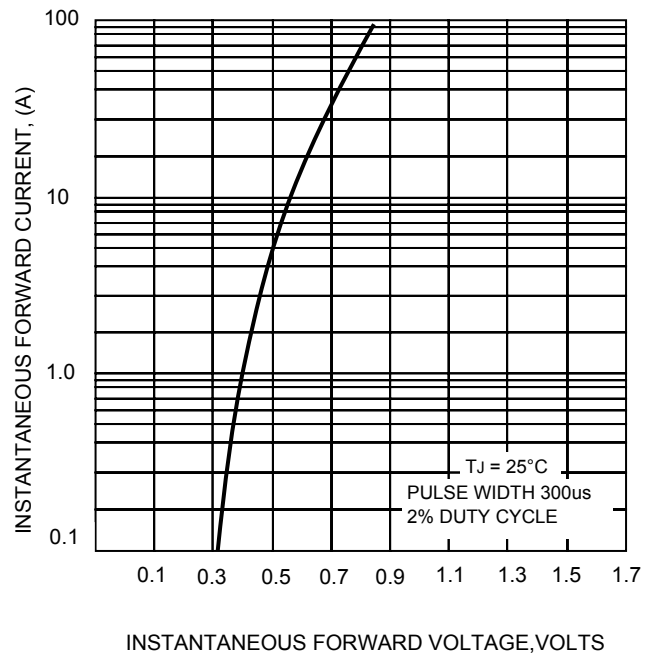


FIG.4-TYPICAL FORWARD CHARACTERISTICS



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



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