

### **SQ1240 thru SQ12100**

# PHOTOVOLTAIC SOLAR CELL PROTECTION SCHOTTKY RECTIFIER

# REVERSE VOLTAGE - 40 to 100Volts FORWARD CURRENT - 12.0 Amperes

#### **FEATURES**

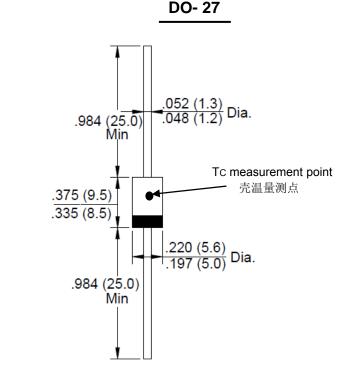
- Metal of silicon rectifier, majority carrier conduction
- Guard ring for transient protection
- Low power loss, high efficiency
- High current capability, low VF
- High surge capacity
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

#### **MECHANICAL DATA**

Case: JEDEC DO-27 molded plasticPolarity: Color band denotes cathode

●Weight: 0.04ounces , 1.1grams

• 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%

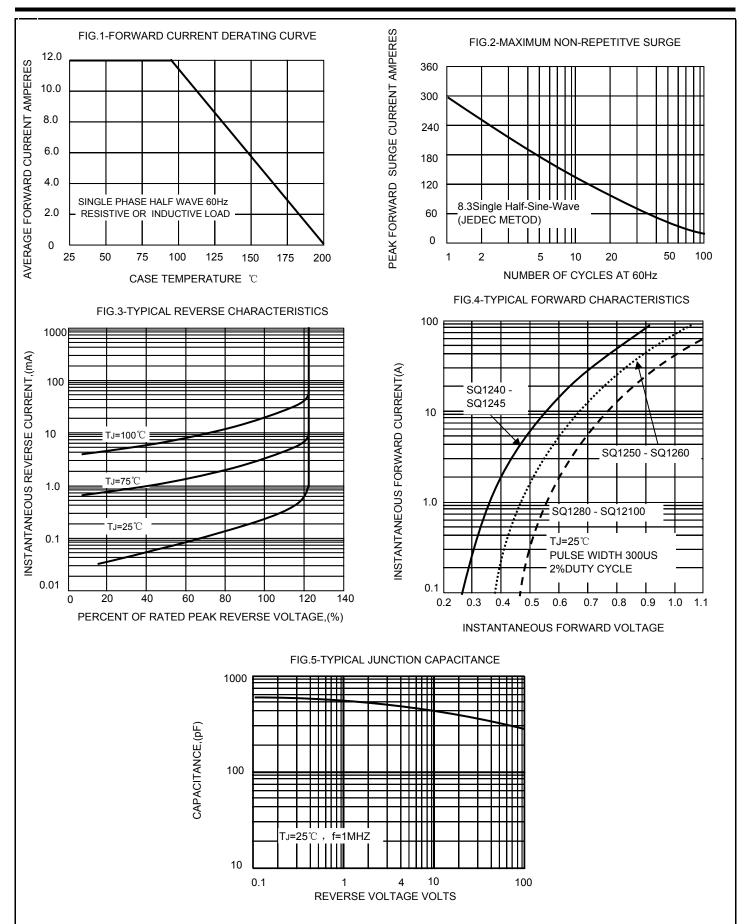
SYMBOL VRRM	SQ1240	SQ1245	SQ1250	SQ1260	SQ1280	SQ12100	UNIT	
VRRM	40					04.2.00	5	
	40	45	50	60	80	100	V	
VRMS	28	31.5	35	42	56	70	V	
VDC	40	45	50	60	80	100	V	
I(AV)	12						Α	
lғsм	300						Α	
VF	0.55 0.7			.7	0.8		V	
lo.	0.5						mΛ	
iR 50							mA	
CJ	450						pF	
Rejc	3.0						°C/w	
TJ	-55 to+200						$^{\circ}$	
Тsтg	-55 to+200						$^{\circ}$	
	VDC I(AV) IFSM VF IR CJ R0JC TJ	VDC 40  I(AV)  IFSM  VF 0.9  IR  CJ  ReJC  TJ	VDC 40 45  I(AV)  IFSM  VF 0.55  IR  CJ  ReJC  TJ	VDC         40         45         50           I(AV)         1           IFSM         30           VF         0.55         0.           IR         5           CJ         45           ReJC         3.           TJ         -55 tc	VDC         40         45         50         60           I(AV)         12           IFSM         300           VF         0.55         0.7           IR         50           CJ         450           ReJC         3.0           TJ         -55 to+200	VDC         40         45         50         60         80           I(AV)         12           IFSM         300           VF         0.55         0.7         0           IR         0.5         50           CJ         450           ReJC         3.0           TJ         -55 to+200	VDC         40         45         50         60         80         100           I(AV)         12         12         12         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15         15 <td< td=""></td<>	

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

Rev. 7, 16-Mar-2017





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

Rev. 7, 16-Mar-2017



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