

## 20SQ100 SCHOTTKY BARRIER RECTIFIER

### Applications:

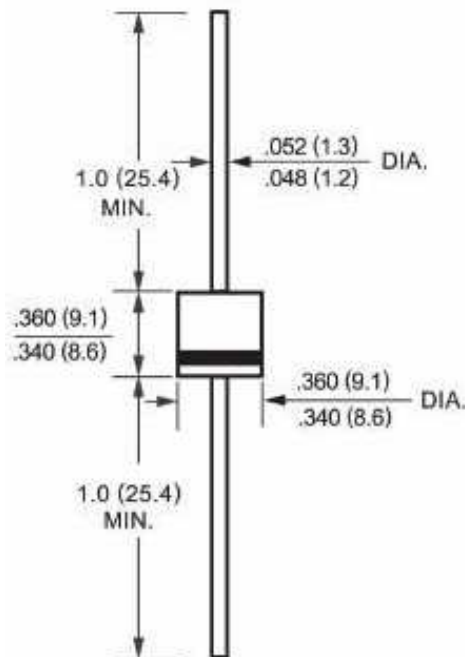
- DC-DC converters
- AC adapter
- High frequency rectification circuit
- Bypass diodes
- Photovoltaic Solar cell Protection Schottky Rectifier

### Features:

- Super-high speed & low noise switching
- Low voltage drop
- This is a Pb – Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request



### Mechanical Dimensions: In Inches/ mm



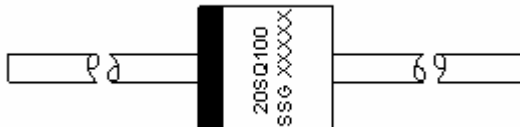
**R-6**



Technical Data  
Data Sheet N1519, Rev. -

**Green Products**

**Marking Diagram:**



Where XXXXX is YYWWL

- 20 = Forward Current (20A)
- S = Package Type
- Q = Device Type
- 100 = Reverse Voltage (100V)
- SSG = SSG
- YY = Year
- WW = Week
- L = Lot Number

**Cautions :** Molding resin  
Epoxy resin UL:94V-0

**Ordering Information:**

Device	Package	Shipping
20SQ100	R-6 (Pb-Free)	500pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.



**Maximum Ratings and Electrical Characteristics** @ $T_A=25^\circ\text{C}$  unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

Characteristic	Symbol	20SQ100	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	$V_{RRM}$ $V_{RWM}$ $V_R$	100	V
Average Rectified Output Current (Note 1) @ $T_C = 125^\circ\text{C}$	$I_{F(AV)}$	20	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	280	A
Forward Voltage @ $I_F = 20\text{A}, T_A = 25^\circ\text{C}$ @ $I_F = 20\text{A}, T_A = 125^\circ\text{C}$	$V_{FM}$	0.88 0.74	V
Peak Reverse Current At Rated DC Blocking Voltage @ $T_A = 25^\circ\text{C}$ @ $T_A = 125^\circ\text{C}$	$I_{RM}$	1 6	mA
Junction Capacitance (Note 2)	$C_T$	400	pF
Maximum Thermal Resistance, Junction to lead	$R_{\theta JL}$	8	$^\circ\text{C}/\text{W}$
Storage Temperature Range	$T_J, T_{STG}$	-50 to +150	$^\circ\text{C}$
Case Style		R-6	

Note:1. Mount on Cu-Pad Size 5mm×5mm on P.C.B.

2.  $V_R = 5\text{V}$ ,  $f_{SIG} = 1\text{MHz}$

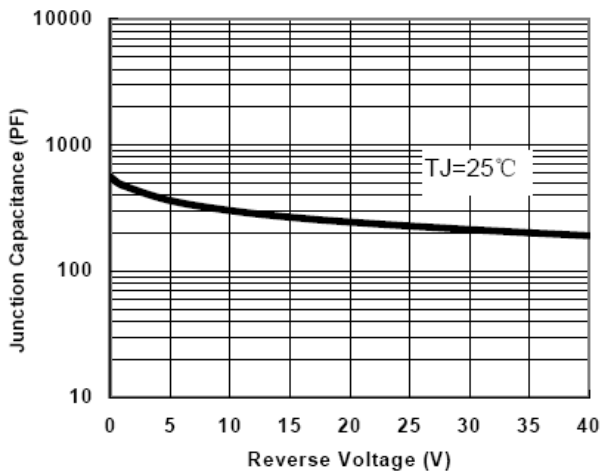


Fig.1-Typical Junction Capacitance

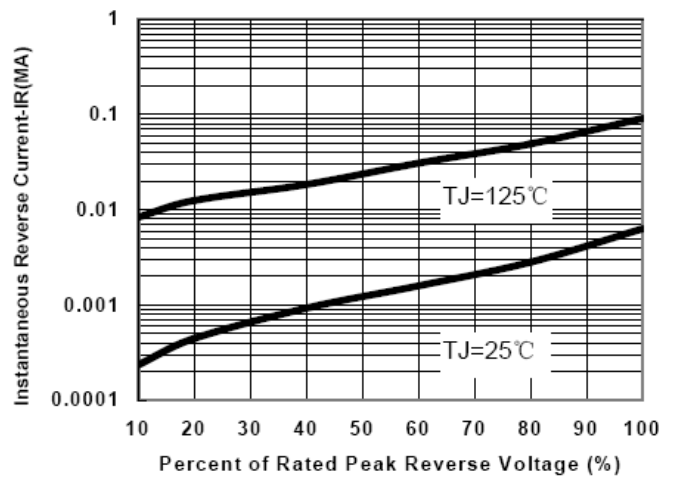


Fig.2-Typical Reverse Characteristics

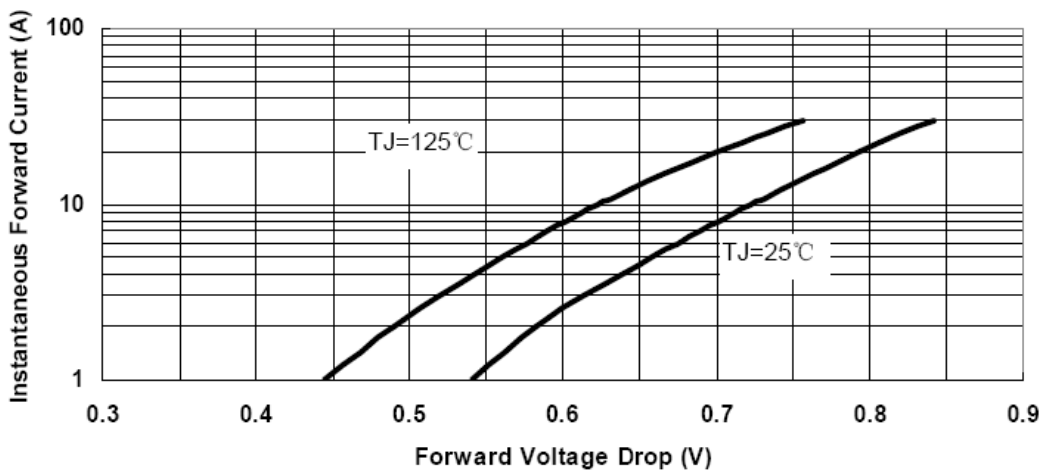


Fig.3-Typical Instantaneous Forward Voltage Characteristics



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