



20SQ045L SCHOTTKY BARRIER RECTIFIER

Applications:

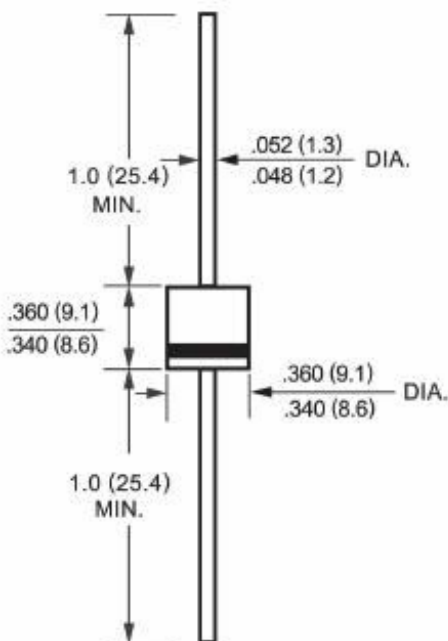
- DC-DC converters
- AC adapter
- High frequency rectification circuit
- Bypass diodes
- Photovoltaic Solar cell Protection Schottky Rectifier

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

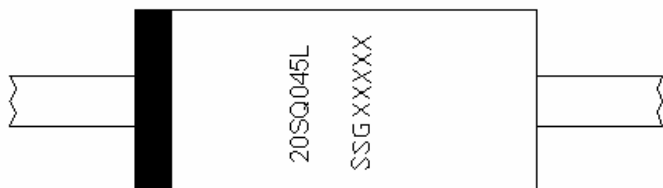


Technical Data
Data Sheet N1250, Rev. A

Green Products

Marking Diagram:

Where XXXXX is YYWWL



- 20 = Forward Current (20A)
- S = Package Type
- Q = Device Type
- 045 = Reverse Voltage (45V)
- L = Low VF
- SSG = SSG
- YY = Year
- WW = Week
- L = Lot Number

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

Ordering Information:

Device	Package	Shipping
20SQ045L	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 Rating:

Characteristics	Symbol	Conditions	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	-	45	V
Max. average forward current	$I_{F(AV)}$	R- load, $T_a=25^{\circ}C$	20	A
Surge(Non-repetitive) Forward Current	I_{FSM}	8.3ms single half sine-wave	350	A



Electrical Characteristics (Ta=25°C Unless otherwise specified)

Characteristics	Symbol	Conditions	Max.	Unit	
Peak Forward Voltage	V _{FM}	I _{FM} =20.0A, Ta=25°C	0.50	V	
Peak Forward Voltage	V _{FM}	I _{FM} =20.0A, Ta=125°C	0.45	V	
Peak Reverse Current	I _{RRM1}	V _{RM} =V _{RRM}	Ta=25°C	1.0	mA
	I _{RRM2}		Ta=125°C	200	
Max. Junction Capacitance (per leg)	C _T	@V _R = 5V, T _C = 25 °C f _{SIG} = 1MHz	1300	pF	
Thermal Resistance(Typical)	R _{θJ-c}	Between junction and case	3.0	°C/W	
	R _{θJ-L}	Between junction and lead	2.0		

Thermal-Mechanical Specifications:

Characteristics	Symbol	Condition	Specification	Units
Junction Temperature	T _J	At reduced reverse voltage: V _R ≤ 80%V _{RRM}	-55 to +125	°C
		At reduced reverse voltage: V _R ≤ 50%V _{RRM}	-55 to +180	
		In DC forward mode	-55 to +200	
Storage Temperature	T _{stg}	-	-55 to +125	°C
Approximate Weight	wt	-	2.24	g
Case Style	R-6			

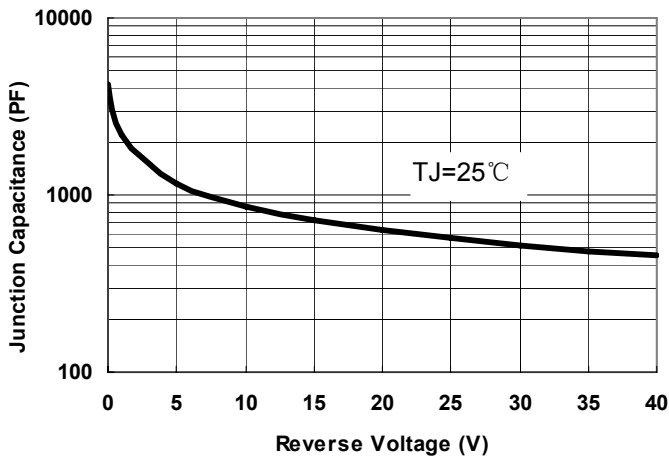


Fig.1-Typical Junction Capacitance

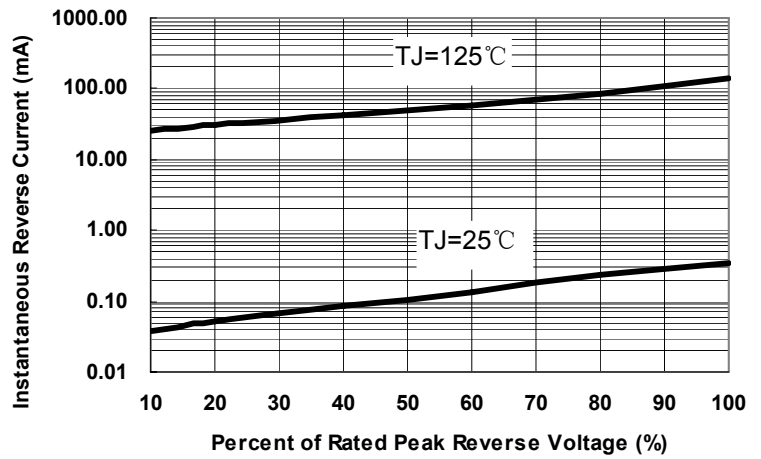


Fig.2-Typical Reverse Characteristics

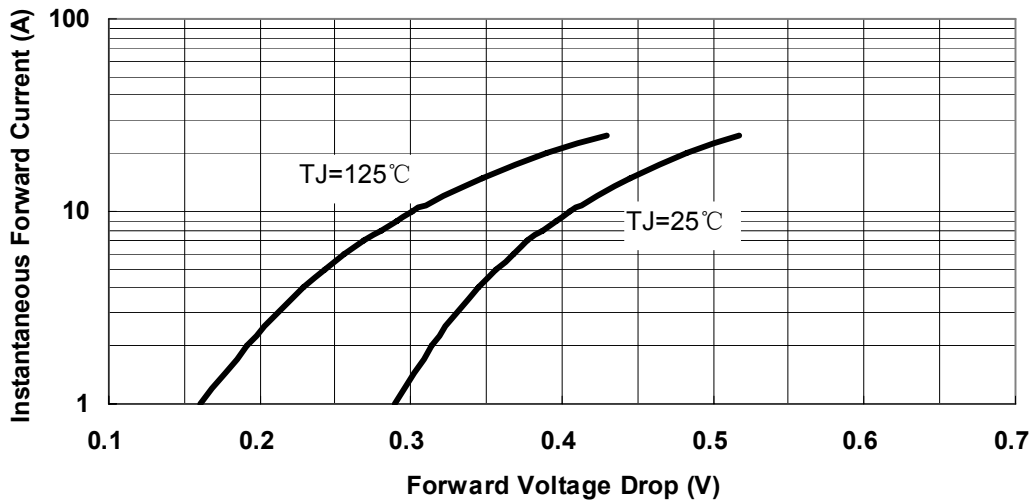


Fig.3-Typical Instantaneous Forward Voltage Characteristics



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