



15SQ SERIES SCHOTTKY BARRIER RECTIFIER

Applications:

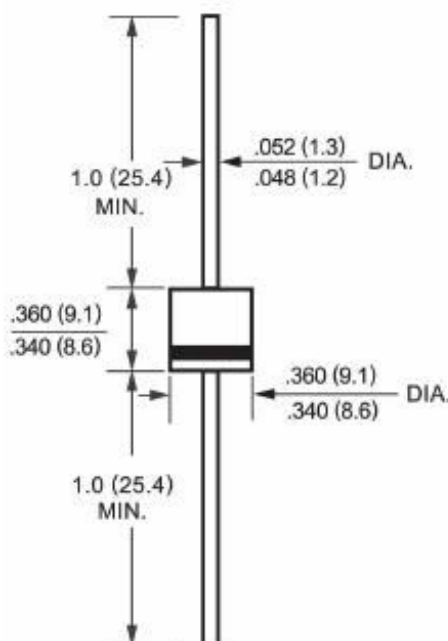
- DC-DC converters
- AC adapter
- High frequency rectification circuit
- Bypass diodes
- Photovoltaic Solar cell Protection Schottky Rectifier

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



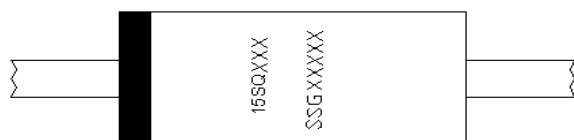
Mechanical Dimensions: In Inches/ mm



R-6



Marking Diagram:



Where XXX is 030/045/050/060/100

Where XXXXX is YYWWL

15 = Forward Current (15A)
S = Package Type
Q = Device Type
XXX = Reverse Voltage (30/45/50/60/100V)
SSG = SSG
YY = Year
WW = Week
L = Lot Number

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

Ordering Information:

Device	Package	Shipping
15SQ030 15SQ045 15SQ050 15SQ060 15SQ100	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}	-	15SQ030	V
			15SQ045	
			15SQ050	
			15SQ060	
			15SQ100	
Max. average forward current	$I_{F(AV)}$	R- load, $T_a=50^{\circ}\text{C}$	15	A
Surge(Non-repetitive) Forward Current	I_{FSM}	8.3ms single half sine-wave	15SQ030	A
			15SQ045	
			15SQ050	
			15SQ060	
			15SQ100	

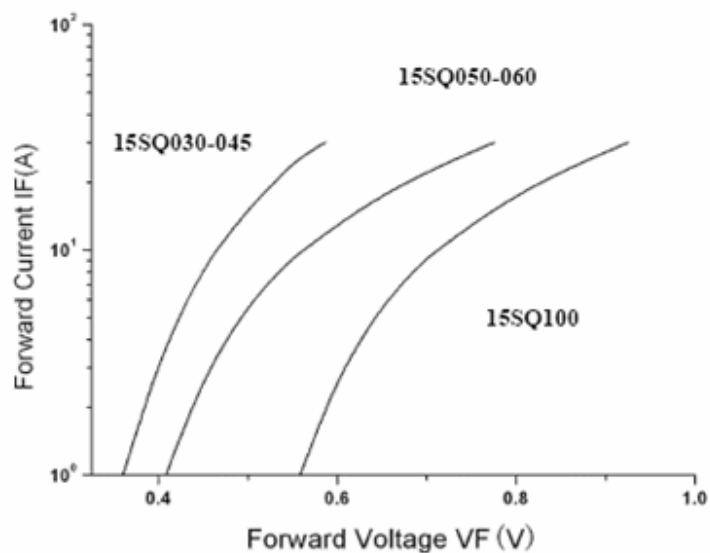


Electrical Characteristics (Ta=25°C Unless otherwise specified)

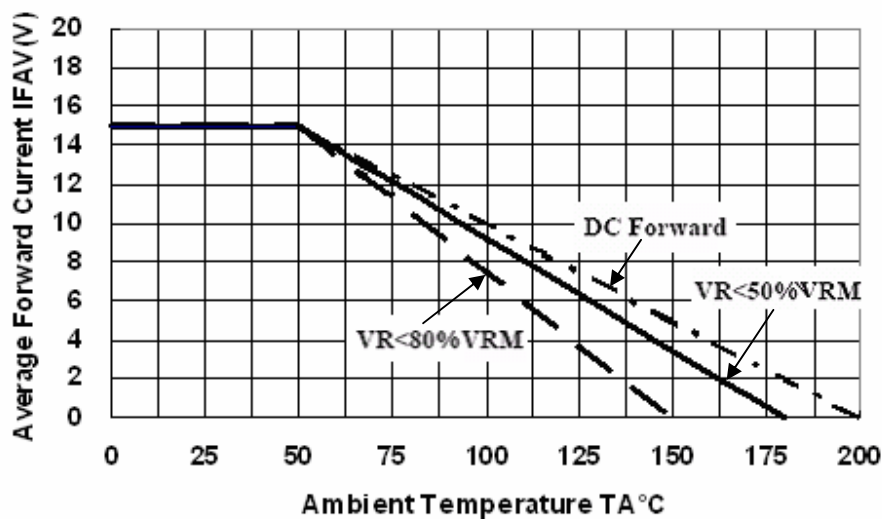
Characteristics	Symbol	Conditions		Max.		Unit
Peak Forward Voltage	V _{FM}	I _{FM} =15.0A,Ta=25℃		15SQ030	0.55	V
				15SQ045	0.55	
				15SQ050	0.68	
				15SQ060	0.68	
				15SQ100	0.83	
Peak Reverse Current	I _{RRM1}	V _{RM} =V _{RRM}	Ta=25℃	0.5		mA
	I _{RRM2}		Ta=100℃	25		
Thermal Resistance(Typical)	R _{θJ-c}	Between junction and case		3.0		℃/W
	R _{θJ-L}	Between junction and lead		2.0		

Thermal-Mechanical Specifications:

Characteristics	Symbol	Condition	Specification	Units
Max. Junction Temperature at reduced reverse voltage at reduced reverse voltage in DC forward mode	T_J	$V_R \leq 80\% V_{RRM}$ $V_R \leq 50\% V_{RRM}$	-55 to +150 -55 to +180 -55 to +200	$^{\circ}C$
Max. Storage Temperature	T_{stg}	-	-55 to +150	$^{\circ}C$
Approximate Weight	wt	-	2.24	g
Case Style	R-6			



Typical Forward Characteristics



Current Derating



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