



15SQ030 thru 15SQ100

R-6 Axial Low Voltage Drop Schottky Rectifier

Features

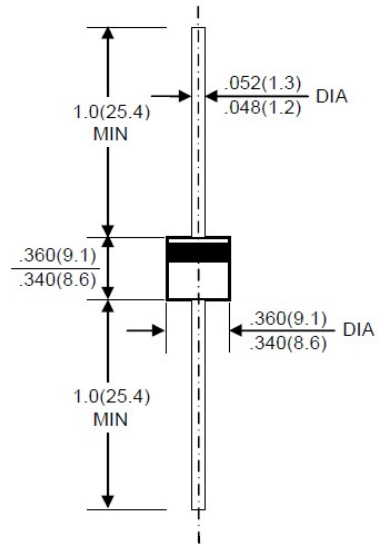
- Low Forward Voltage Drop
- Metal to Silicon Rectifier; majority carrier conduction
- Low Power Loss and High Efficiency
- High Current Surge Capability
- 15A Current Capability
- Guard ring for transient protection
- 200°C Operating Junction Temperature
- For use in low voltage, high frequency inverters, freewheeling, and polarity protection applications

Mechanical Data

- Case: JEDEC R-6 Molded Plastic
- Polarity: Color band denotes Cathode
- Weight: 0.07oz (2.1g)
- Mounting Position: Any

SCHOTTKY BARRIER RECTIFIER 15 AMPERES, 30 to 100 VOLTS

Package: **R-6 (AXIAL)**
Marking: **15SQxx**



Dimensions in inches and (millimetres)

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	Characteristics	15SQ30	15SQ35	15SQ40	15SQ45	15SQ50	15SQ60	15SQ80	15SQ100	Unit
V_{RRM}	Maximum Repetitive Reverse Voltage	30	35	40	45	50	60	80	100	V
V_{RMS}	Maximum RMS Voltage	21	24.5	28	31.5	35	42	56	70	
V_R	Maximum DC Reverse Voltage	30	35	40	45	50	60	80	100	
$I_{F(AV)}$	Average Rectified Forward Current, $T_C=95^\circ\text{C}$	15								A
I_{FSM}	Peak Forward Surge Current, 8.3ms, Half Sine wave	275								A
V_F	Peak Forward Voltage at 15A (Note 1)	0.55				0.7		0.8		V
I_R	Maximum Reverse Current at Rated DC Blocking Voltage	$T_C = 25^\circ\text{C}$		0.1						mA
		$T_C = 125^\circ\text{C}$		50						
C_J	Typical Junction Capacitance (Note 2)	450								pF
$R_{\theta JC}$	Typical Thermal Resistance (Note 2)	3								$^\circ\text{C}/\text{W}$
T_J	Junction Temperature Range in DC forward mode	-55 to +200								$^\circ\text{C}$
T_S	Storage Temperature Range	-55 to +175								$^\circ\text{C}$
VESD	ESD Capability	15000								V
Notes:										
1. 300us Pulse Width, 2% Duty Cycle										
2. Measured at 1.0MHz and applied reverse voltage at 4.0VDC										
3. Thermal Resistance Junction to Case										

May 2015 Rev.00 /rcd



Rating and Characteristic Curves

