

## Schottky Barrier Rectifier, 15.0 A

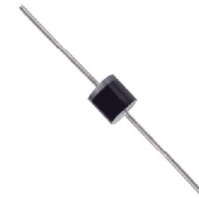
### Features

- Diffused junction
- Low cost
- Low reverse leakage current
- High surge current capability & low forward voltage drop
- Polarity: Color Band denotes Cathode
- High efficiency

### Mechanical Data

- Case: JEDEC R-6 molded plastic
- Polarity: Color band denotes cathode
  - Weight: 2.1 grams
  - Mounting position: Any

Thermal Specifications ( $T_C = 25^\circ\text{C}$ unless otherwise specified)			
Parameters	Symbol	Values	Units
Maximum operating junction temperature range	$T_J$	-55 to +200	$^\circ\text{C}$
Maximum storage temperature range	$T_{STG}$	-55 to +200	$^\circ\text{C}$
Typical thermal resistance junction to case	$R_{\theta JC}$	3.5	$^\circ\text{C}/\text{W}$



JEDEC R-6

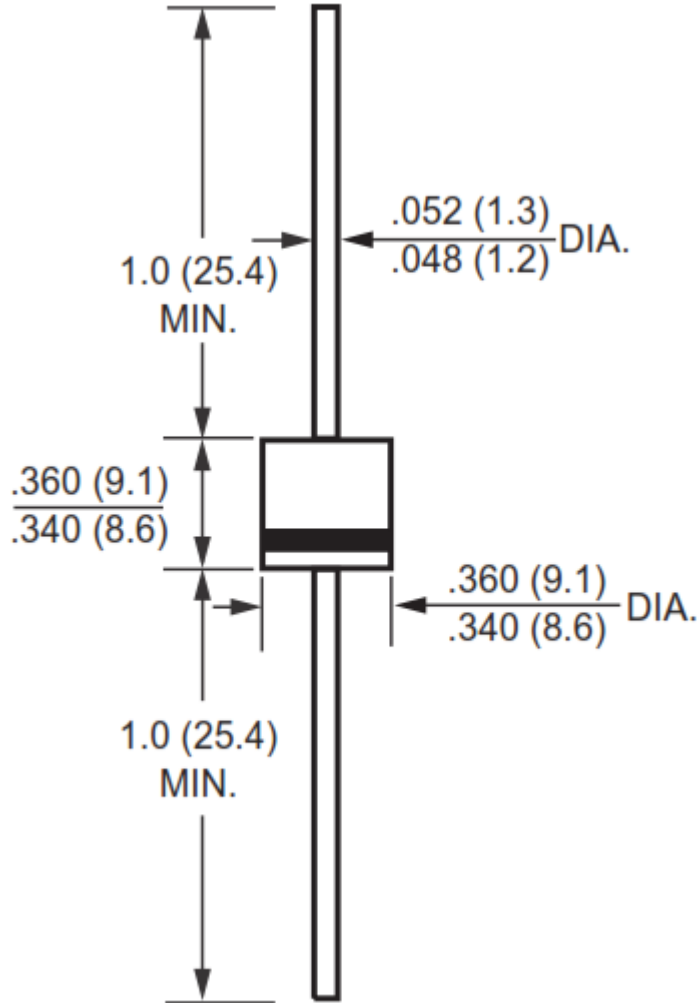
Electrical Characteristics ( $T_C = 25^\circ\text{C}$ unless otherwise specified)											
Parameter	Symbol	15SQ030	15SQ035	15SQ040	15SQ045	15SQ050	15SQ060	15SQ080	15SQ100	Units	
Maximum repetitive peak reverse voltage	$V_{RRM}$	30	35	40	45	50	60	80	100	V	
Maximum RMS voltage	$V_{RMS}$	21	24.5	28	31.5	35	42	56	70	V	
Maximum DC blocking voltage	$V_{DC}$	30	35	40	45	50	60	80	100	V	
Maximum average forward output current @ $T_C = 95^\circ\text{C}$	$I_{F(AV)}$	15								A	
Peak forward surge current (8.3ms) single half sine-wave superimposed on rated load	$I_{FSM}$	275								A	
Forward voltage drop @ 15A DC (Note 1)	$V_F$	0.55				0.7		0.8		V	
Typical junction capacitance (Note 2)	CJ	450								pF	
Maximum DC reverse current at rated DC blocking voltage	$T_A = 25^\circ\text{C}$	$I_R$								0.5	mA
	$T_A = 100^\circ\text{C}$									50	

### NOTES:

- (1) 300  $\mu\text{s}$ , pulse width, 2% duty cycle
- (2) Measured at 1.0 MHz and reverse voltage of 4.0 VDC.

**Package Outlines**

**R-6**



**Dimensions in inches and (millimeters)**