

VOLTAGE RANGE: 35-100V

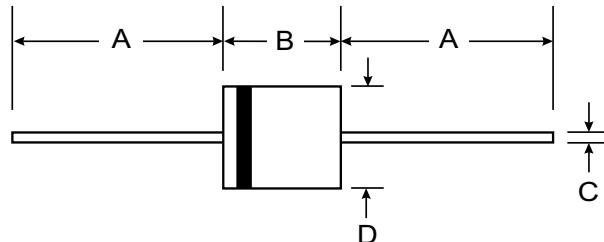
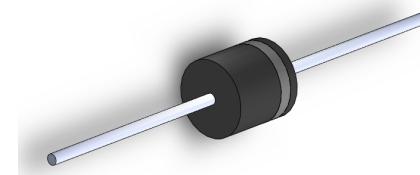
CURRENT: 15.0 A

Features

- Schottky Barrier Chip
 - Guard Ring Die Construction for Transient Protection
 - High Current Capability
 - Low Power Loss, High Efficiency
 - High Surge Current Capability
 - For Use in Low Voltage, High Frequency
 - Inverters, Free Wheeling, and Polarity Protection Applications
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Mechanical Data

- Case: R-6 Molded Plastic
- Terminals: Axial Leads, Solderable per MIL-STD-202, Method 208
- Polarity: Color Band Indicates Cathode
- Approx. Weight: 1.7 grams
- Mounting Position: Any



R-6		
Dim	Min	Max
A	25.4	—
B	8.6	9.1
C	1.2	1.3

All Dimensions in mm

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	SR1535	SR1545	SR1550	SR1560	SR1580	SR15100	Unit		
Maximum repetitive peak reverse voltage	V_{RRM}	35	45	50	60	80	100	V		
Maximum RSM voltage	V_{RSM}	35	45	50	60	80	100	V		
Maximum DC blocking voltage	V_{DC}	35	45	50	60	80	100	V		
Maximum average forward rectified current 0.375" (9.5mm) lead length (See fig. 1)	$I_{F(AV)}$	15.0						A		
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM1}	300						A		
Thermal resistance, junction to ambient	$R_{\theta JA}$	40						$^\circ\text{C/W}$		
Maximum instantaneous forward voltage at 15.0A	V_F	0.55		0.60	0.70	0.90	V			
Maximum DC reverse current $T_A = 25^\circ\text{C}$	I_R	200						μA		
Maximum DC reverse current $T_A = 100^\circ\text{C}$	I_R	80						mA		
Typical junction capacitance at 4.0V, 1MHz	C_J	500		380		PF				
Operating storage temperature range and storage temperature range	T_J T_{STG}	−65 to +200						$^\circ\text{C}$		
		−65 to +200						$^\circ\text{C}$		

Characteristic Curves (TA = 25 C unless otherwise noted)

Fig. 1 Forward Current Derating Curve

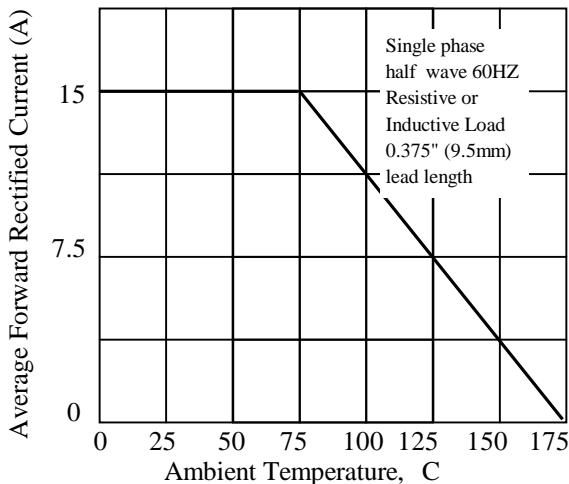


Fig 3. Typical Instantaneous Forward Characteristics

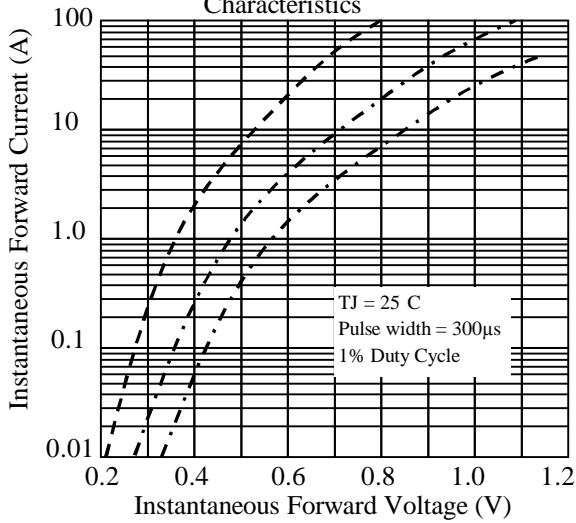


Fig 5. typical transient thermal impedance

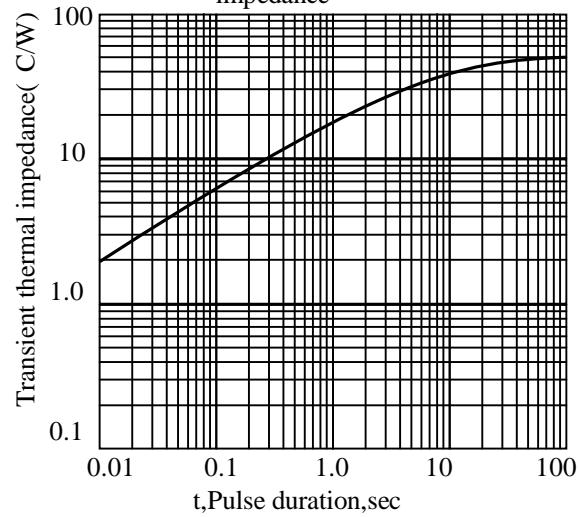


Fig. 2 Maximum Non-repetitive Peak Forward Surge Current

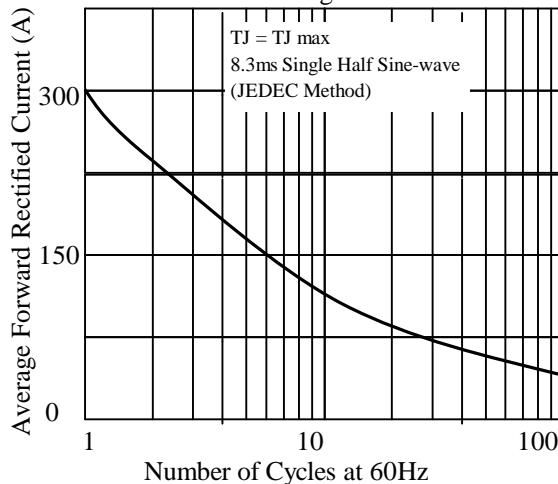


Fig 4. Typical Reverse Characteristics

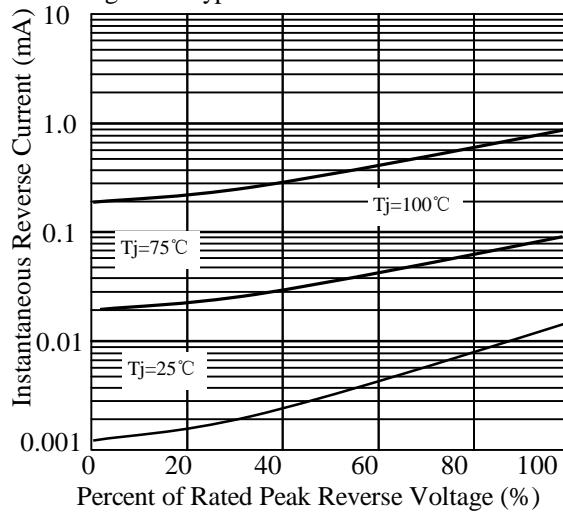


Fig 6. Typical Junction Capacitance

