

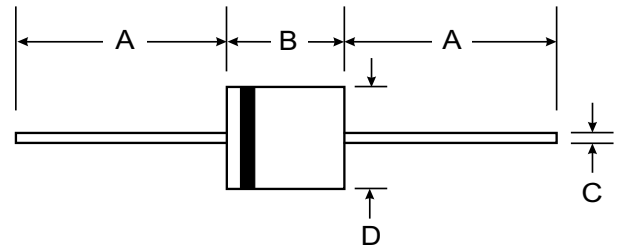
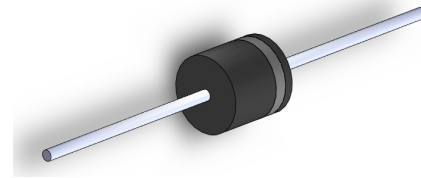
VOLTAGE RANGE: 20- 40V
CURRENT: 15.0A

Features

- Low power loss, high efficiency.
- High current capability, Low VF.
- High reliability
- High surge current capability.
- Epitaxial construction.
- Guard-ring for transient protection.
- For use as Bypass diode in Solar application.

Mechanical Data

- Case: R-6, Molded Plastic
- Terminals: Axial Leads, Solderable per
- MIL-STD-202 Method 208
- Polarity: Color Band Denotes Cathode
- Weight: 1.7 grams (approx.)
- 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°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	SR1502	SR1503	SR1504	Unit
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	30	40	V
Maximum RMS Voltage	V _{RMS}	14	21	28	V
Maximum DC Blocking Voltage	V _{DC}	20	30	40	V
Maximum Average Forward Rectified Current .R-load @T _A = 50°C (Note 1)	I _(AV)	15			A
Repetitive Peak Forward Current f > 15 Hz (Note 1)	I _{FRM}	60			A
Peak Forward Surge Current, 50/60 Hz Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	300 / 340			A
Maximum Instantaneous Forward Voltage @ 5.0A @ TA=25°C @ 15.0A	V _F		0.45 0.55		V
Maximum DC Reverse Current @ T _A =25°C	I _R		500		uA
at Rated DC Blocking Voltage @ TA=100°C			20		mA
Rating for fusing t < 10ms @ TA=25°C	I ² t		390		A ² S
Maximum Thermal Resistance	R _{θJA} R _{θJL}		25 2.5		°C/W
Junction Temperature Range - in DC forward mode	T _J		-50 to +150 <=200		°C
Storage Temperature Range	T _{STG}		-50 to +175		°C

Notes: 1. Valid, if leads are kept at ambient temperature at a distance of 10 mm from case.



RATINGS AND CHARACTERISTIC CURVES (SR1502 THRU SR1504)

FIG.1 Rated Forward Current vs Ambient Temp. Curve

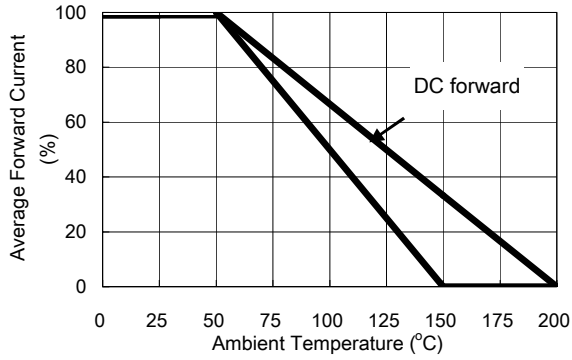


FIG 2 Maximum Forward Surge Current

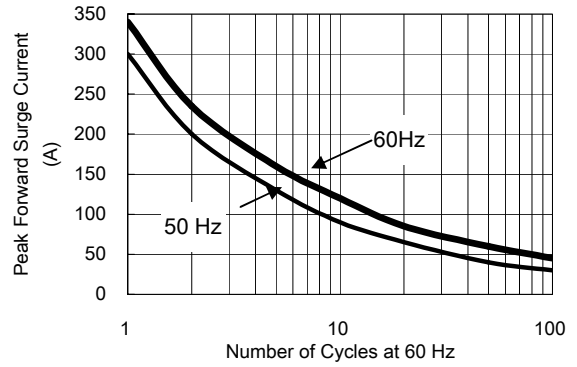


FIG 3 Typical Forward Characteristics

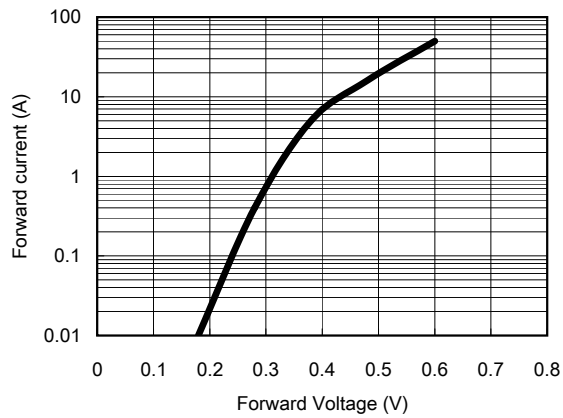


FIG 4 Typical Reverse Characteristic

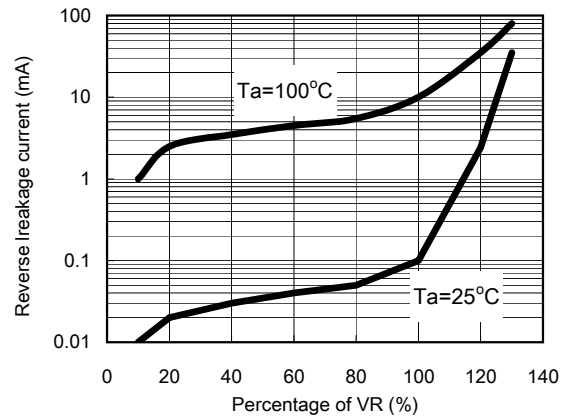


FIG 5 Typical Junction Capacitance

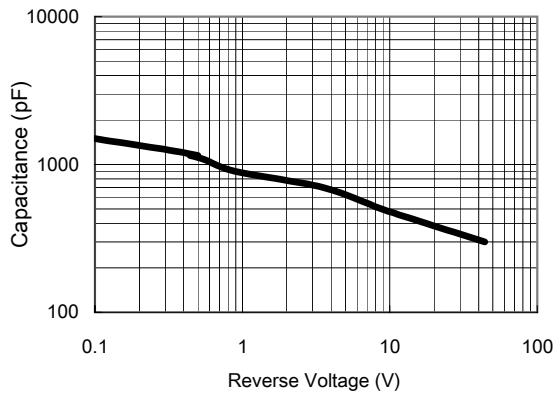


FIG 6 Typical transient Thermal Resistance

