

**RoHS Compliant Product**

A suffix of "-C" specifies halogen & lead-free

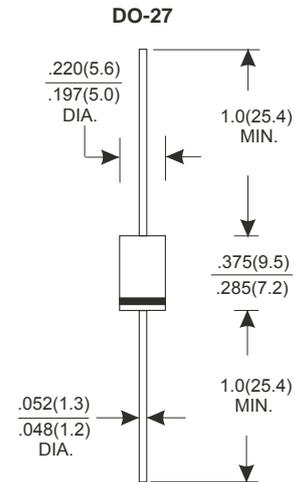


**FEATURES**

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Epitaxial construction

**MECHANICAL DATA**

- Case: Molded plastic
- Epoxy: UL94V-1 rate flame retardant
- Lead: Lead solderable per MIL-STD-202 method 208 guaranteed
- Polarity: As Marked
- Mounting position: Any
- Weight: 1.10 grams (Approximately)



Dimensions in inches and (millimeters)

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Rating 25°C ambient temperature unless otherwise specified.  
Single phase half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

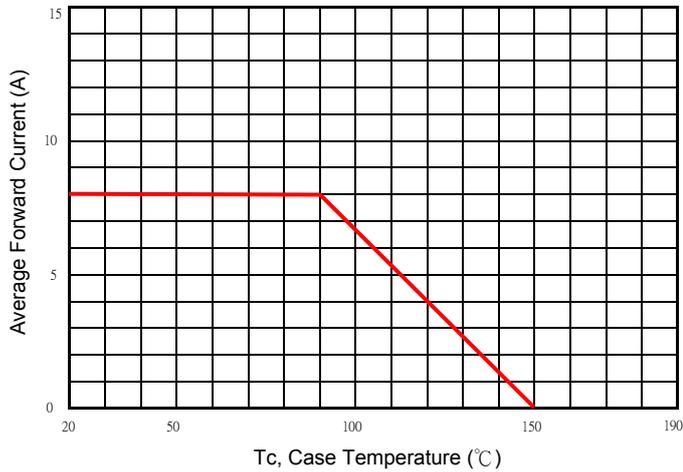
TYPE NUMBER	SR8150E	UNITS
Maximum Recurrent Peak Reverse Voltage	150	V
Working Peak Reverse Voltage	150	V
Maximum DC Blocking Voltage	150	V
Maximum Average Forward Rectified Current See Fig. 1	8	A
Peak Forward Surge Current, 8.3 ms single half sine-wave Superimposed on rated load (JEDEC method)	150	A
Maximum Instantaneous Forward Voltage (IF = 8 Amps, TA = 25°C)	0.87	V
Maximum Instantaneous Forward Voltage (IF = 8 Amps, TA = 125°C)	0.73	
Maximum DC Reverse Current at Rated DC Blocking Voltage TA = 25°C	0.1	mA
TA = 125°C	8	mA
Typical Junction Capacitance (Note 1)	200	pF
Typical Thermal Resistance RθJA (Note 2)	28	°C /W
Operating Temperature Range TJ	-50 ~ +150	°C
Storage Temperature Range TSTG	-65 ~ +175	°C

NOTES:

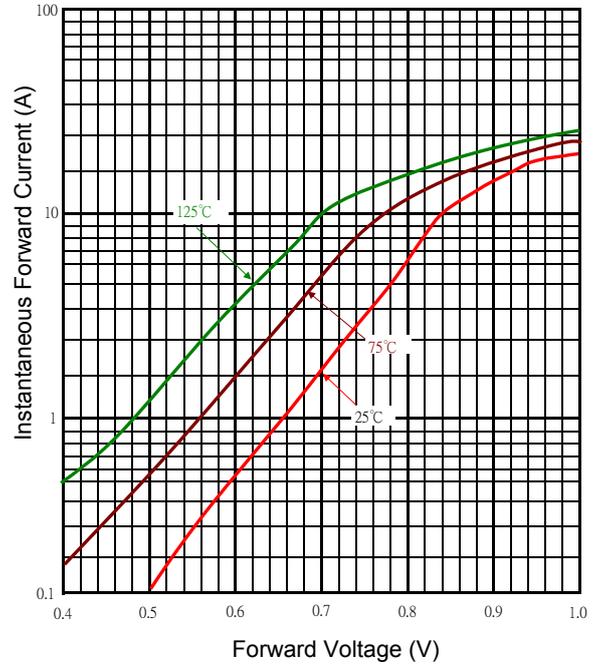
1. Measured at 1MHz and applied reverse voltage of 5.0V D.C.
2. Junction to Ambient. PCB mounted with 5.0mm x 5.0mm copper pad areas

**TESTING AND CHARACTERISTIC CURVES**

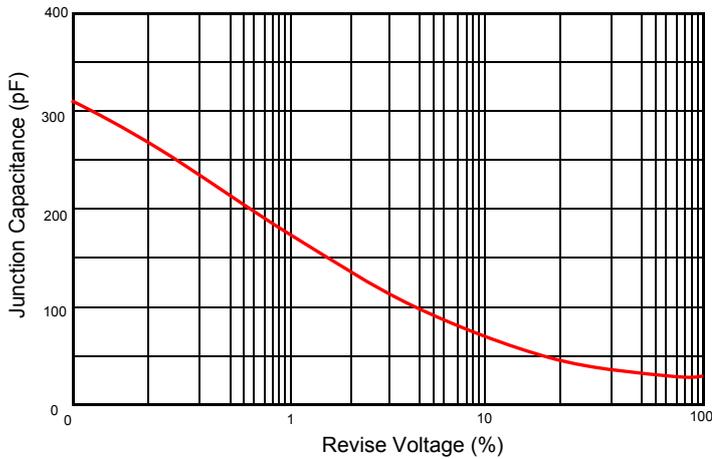
Typical Forward Current Derating Curve



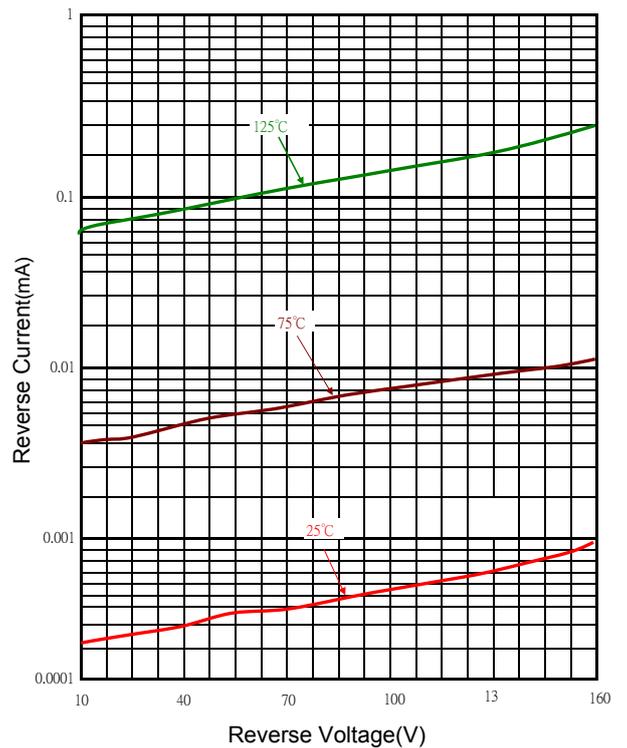
Typical Forward Characteristic



Typical Junction Capacitance



Typical Reverse Characteristic



Maximum Non- Repetitive Forward Surge Current

