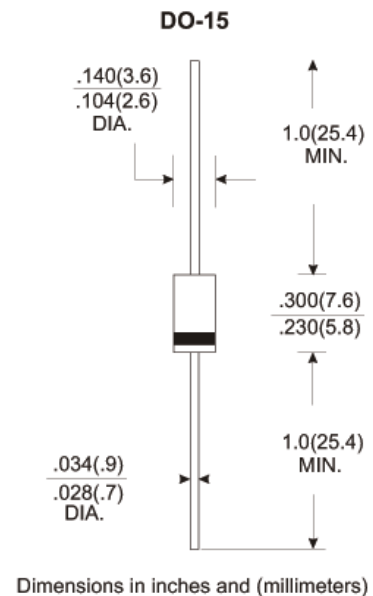


Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction ,majority carrier conduction
- Guard ring for over voltage protection
- Low power loss ,high efficiency
- High current capability ,Low forward voltage drop
- High surge capability
- For use in low voltage ,high frequency inverters, Free wheeling and polarity protection applications
- High temperature soldering guaranteed:
260°C/10 seconds at terminals,
- 0.375"(9.5mm)lead length,5lbs.(2.3kg)tension

Mechanical Data

- Case: JEDEC DO-41 molded plastic body
- Terminals: solder plated ,solder able per MIL-STD-750,method 2026
- Polarity: color band denotes cathode end
- Mounting Position: Any
- Dice Size: 44mil
- Weight: 0.014ounce,0.33 gram



Maximum Ratings and Electrical Characteristics

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

	Symbols	SR 220	SR 230	SR 240	SR 250	SR 260	SR 280	SR 2100	SR 2150	SR 2200	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	100	150	200	Volts
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	57	71	105	140	Volts
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	100	150	200	Volts
Maximum average forward rectified current 0.375"(9.5mm) lead length	$I_{(AV)}$	2.0									Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	50.0									Amp
Maximum instantaneous forward voltage at 2.0 A(Note 1)	V_F	0.55		0.70		0.85		0.90		0.95	Volts
Maximum Reverse Current $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage $T_A=100^\circ\text{C}$	I_R	0.5									mAmp
		10									
Typical junction capacitance(Note 3)	C_J	170									pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	35.0									°C/W
Operating Temperature Range	T_J	-65 to +150									°C
Storage Temperature Range	T_{STG}	-65 to +150									°C

NOTES:

1. Pulse test: 300 μ s pulse width, 1% duty cycle
2. Thermal resistance from junction to lead, and/or to ambient P.C.B. mounted
With 0.375"(9.5mm) lead length With 1.5 X1.5"(38X38mm) copper pads
3. Measured at 1.0MHz and reverse voltage of 4.0 volts

RATINGS AND CHARACTERISTIC CURVES (SR220 THRU SR2200)

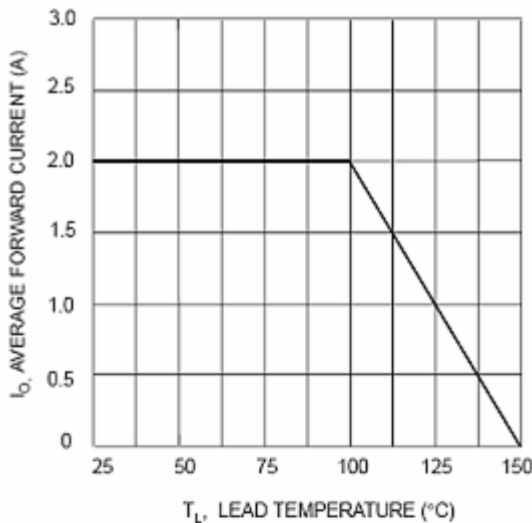


Fig. 1 Forward Current Derating Curve

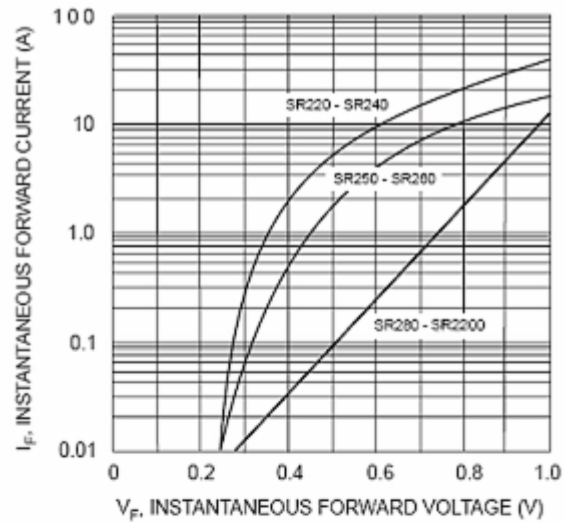


Fig. 2 Typical Forward Characteristics

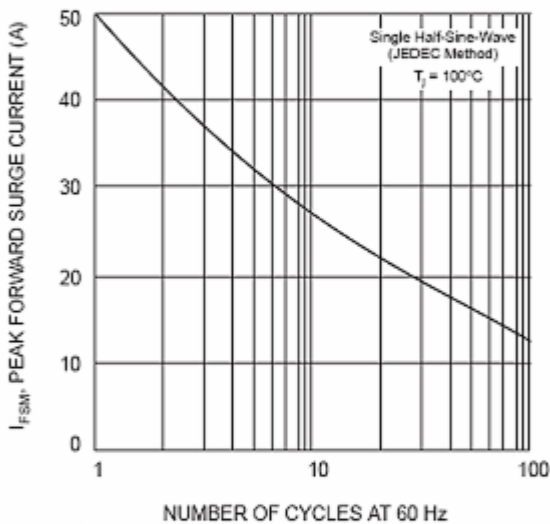


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

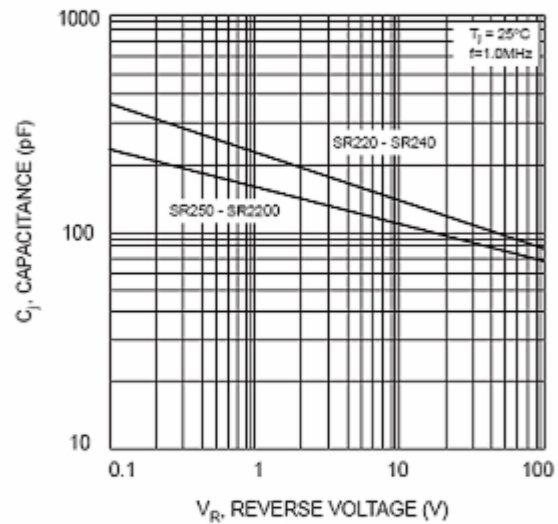


Fig. 4 Typical Junction Capacitance

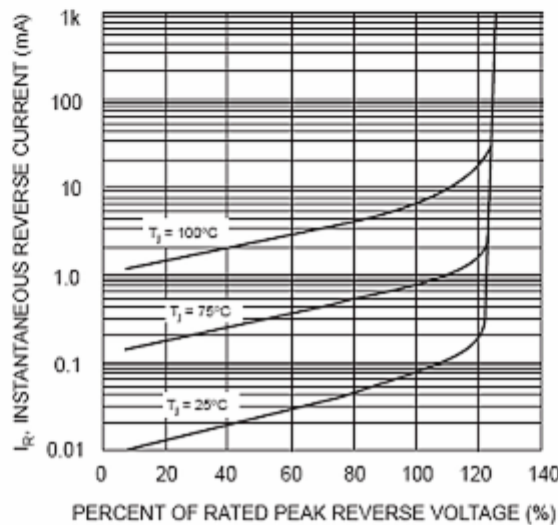


Fig. 5 Typical Reverse Characteristics