



SCHOTTKY BARRIER RECTIFIER

SR202 THRU SR210

VOLTAGE RANGE
CURRENT

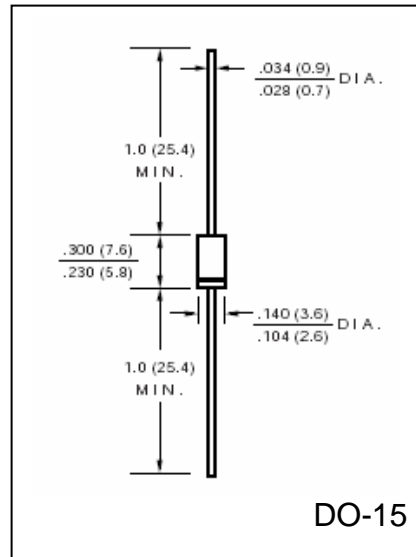
20 to 100 Volts
2.0 Ampere

FEATURES

- Fast switching
- Low forward voltage
- Low power loss for high efficiency
- High Surge capability
- High temperature Soldering guaranteed:
250°C/10 seconds, 0.373" (9.5mm) lead length

MECHANICAL DATA

- Case: Transfer molded plastic
- Epoxy: UL94V-0 rate flame retardant
- Lead: Solderable per MIL-STD-202E Method 208C
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.014 ounce, 0.39 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	SR202	SR203	SR204	SR205	SR206	SR208	SR210	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	100	Volts
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	70	Volts
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	100	Volts
Maximum Average Forward Rectified Current, 0.375" (9.5mm) lead length, (Note 1), $T_J = 90^\circ\text{C}$ (SR202-204), $T_J = 110^\circ\text{C}$ (SR205-210),	$I_{(AV)}$	2.0							Amps
Peak Forward Surge Current 8.3mS single half sine wave superimposed on rated load (JEDEC method)	I_{FSM}	50							Amps
Maximum Instantaneous Forward Voltage @ 2.0A (Note 1)	V_F	0.55			0.75		0.85		Volts
Maximum DC Reverse Current at Rated $T_A = 25^\circ\text{C}$	I_R	2.0							mA
DC Blocking Voltage per element (Note 1) $T_A = 100^\circ\text{C}$		20							
Typical Junction Capacitance (Measured at 1.0MHz and applied reverse voltage of 4.0V)	C_J	170							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	40							$^\circ\text{C/W}$
Operating Junction Temperature Range	T_J	(-55 to +150)							$^\circ\text{C}$
Storage Temperature Range	T_{STG}	(-55 to +150)							$^\circ\text{C}$

Notes:

1. Pulse test: 300 μs pulse width, 1% duty cycle
2. Thermal resistance from junction to ambient PCB mounted with 0.375" (9.5mm) lead length with 2.5" x 2.5" (63.5cm x 63.5cm) copper pads



RATINGS AND CHARACTERISTIC CURVES SR202 THRU SR210

Fig. 1 - Forward Current Derating Curve

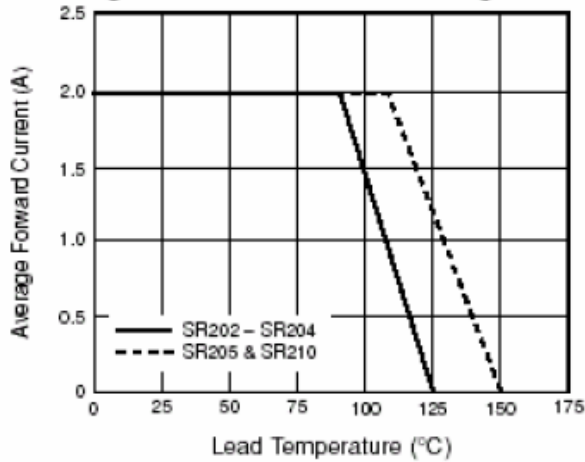


Fig. 2 - Maximum Non-repetitive Surge Current

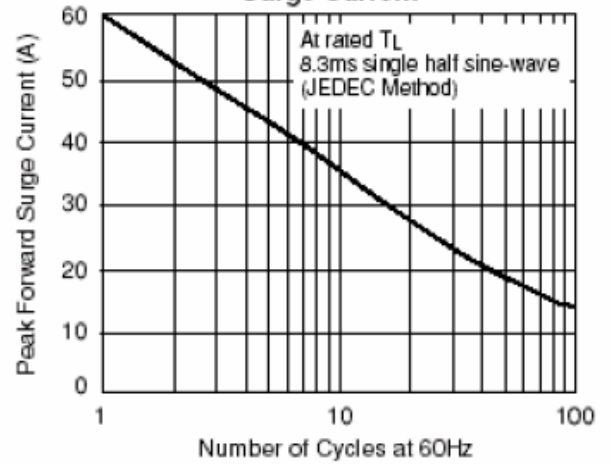


Fig. 3 - Typical Instantaneous Forward Characteristics

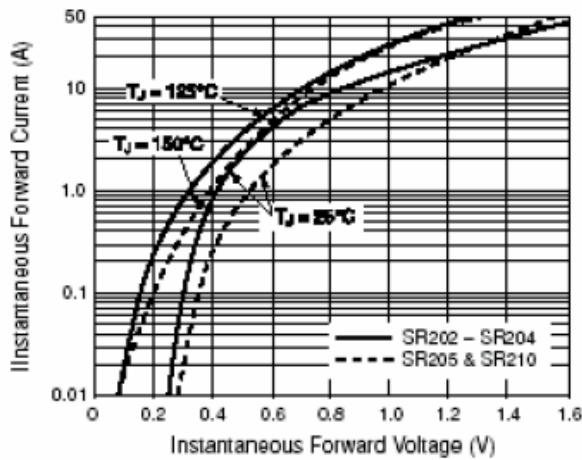


Fig. 4 - Typical Reverse Characteristics

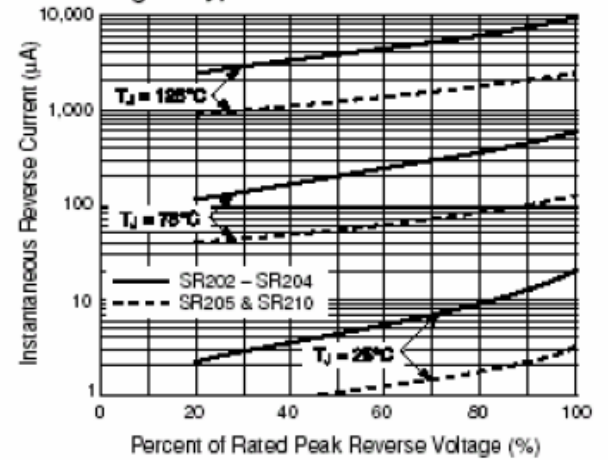


Fig. 5 - Typical Junction Capacitance

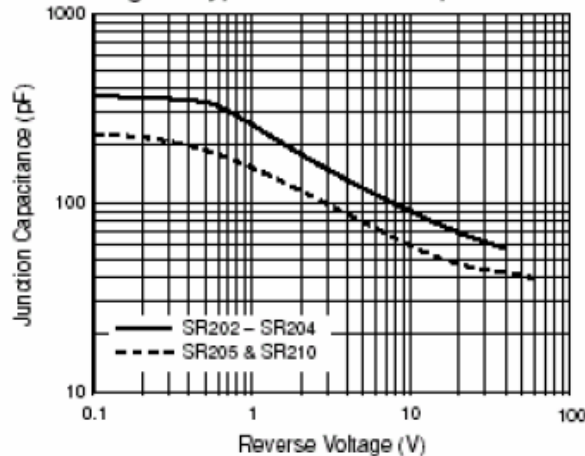


Fig. 6 - Typical Transient Thermal Impedance

