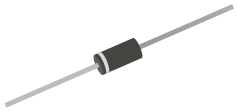
SR202-G Thru. SR210-G

Forward current: 2.0A
Reverse voltage: 20 to 100V
RoHS Device



Features

-Fast switching.

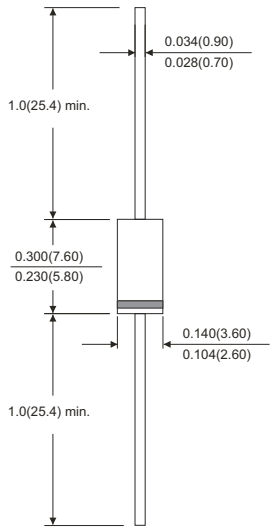
-Low forward voltage, high current capability.

-Low power loss, high efficiency.

-High current surge capability.

-High temperature soldering guaranteed: 250°C/10 seconds, 0.375" (9.5mm) lead length at 5lbs (2.3kg) tension.

DO-15



Dimensions in inches and (millimeter)

Mechanical Data

-Case: transfer molded plastic.

-Epoxy: UL94V-0 rate flame retardant.

-Polarity: color band denoted cathode end.

-Lead: plastic axial lead, solderable per MIL-STD-202E, method 208C.

-Mounting position: any.

-Weight: 0.39 gram.

Maximum Ratings and Electrical Characteristics

Ratings at Ta=25°C unless otherwise noted.
Single phase, half wave, 60Hz, resistive or inductive loaded.
For capacitive load, derate current by 20% .

Parameter	Symbol	SR202-G	SR203-G	SR204-G	SR205-G	SR206-G	SR208-G	SR209-G	SR210-G	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	80	90	100	V
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	57	63	70	V
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	80	90	100	V
Maximum average forward rectified current, See fig.2	I_{AV}	2.0								A
Peak forward surge current, 8.3ms single half sine-wave, superimposed on rated load (JEDEC method)	I_{FSM}	50								A
Maximum instantaneous forward voltage at I_F=2A	V_F	0.55			0.75			0.85		V
Maximum DC reverse current at rated DC blocking voltage (Note 1) T_A=25 °C / T_A=100 °C	I_R	2.0 / 20								mA
Typical junction capacitance (Note 2)	C_J	150								pF
Typical thermal resistance (Note 3)	$R_{\theta JA}$	40								°C/W
Operating junction temperature range	T_J	-65 ~ +125			-65 ~ +150					°C
Storage temperature range	T_{STG}	-65 ~ +150								°C

Note:
1. Test pulse: 300μS pulse width, 1% duty cycle.
2. Measured at 1MHz and applied reverse voltage of 4.0V.
3. Thermal resistance from junction to ambient P.C.B. mounted with 0.375" (9.5mm) lead length with 1.5"x1.5"(38x38mm) copper pads.

RATING AND CHARACTERISTIC CURVES (SR202-G Thru. SR210-G)

Fig.1 Typical Forward Current Derating Curve

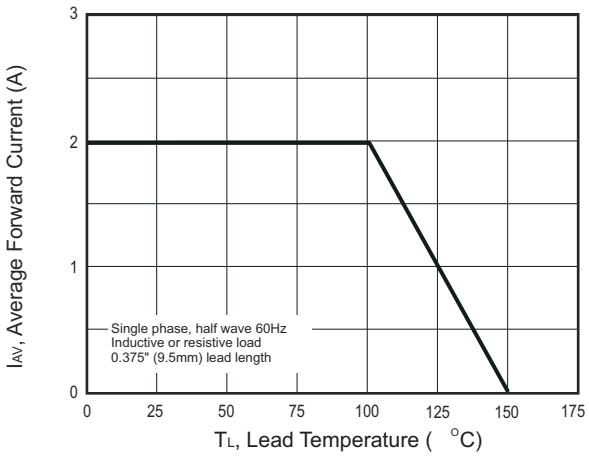


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

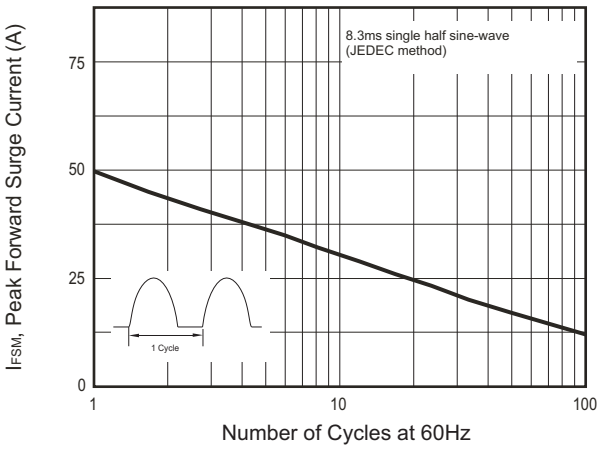


Fig.3 Typical Instantaneous Forward Characteristics

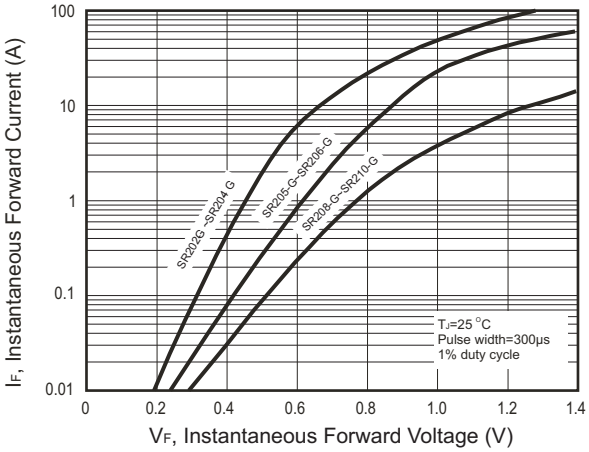


Fig.4 Typical Reverse Characteristics

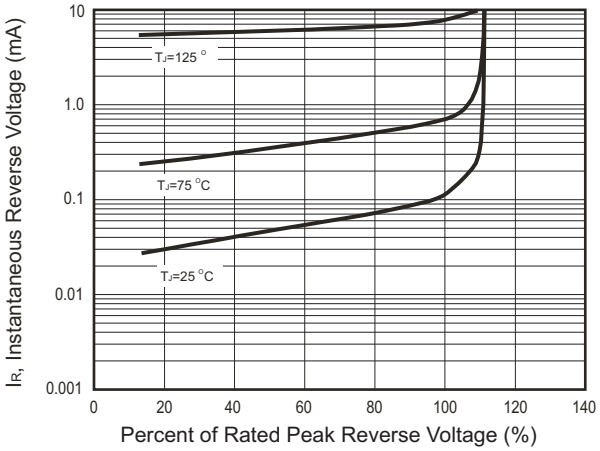


Fig.5 Typical Junction Capacitance