II. Schottky Rectifier

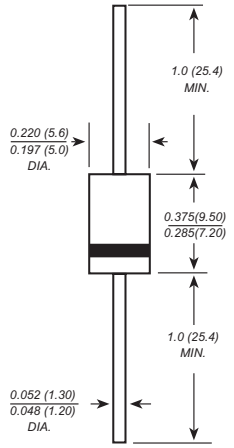
3.0A Schottky Rectifier
SR320~SR3200 (Package: DO-201AD)

FEATURES

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency
- High forward surge current capability
- High temperature soldering guaranteed

MECHANICAL DATA

- Case : JEDEC DO-201AD molded plastic body
- Terminals : Plated axial leads, solderable per MIL-STD-750, Method 2026
- Polarity : Color band denotes cathode end
- Mounting Position : Any
- Weight : 1.18 grams



Case: DO-201AD
Dimensions in inches and (millimeters)

Ratings & Electrical Characteristics

Ratings at 25℃ ambient temperature unless otherwise specified.
Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20%.

Characteristic	Symbol	SR 320	SR 330	SR 340	SR 350	SR 360	SR 380	SR 3100	SR 3150	SR 3200	Units
Maximum repetitive 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	56	70	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_O	3									Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	70									Amps
Maximum forward voltage at 3.0A DC	V_F	0.55			0.70		0.85		0.90	0.95	Volts
Maximum reverse current at rated DC blocking voltage Ta = 25°C	I_R	0.5									mA
Ta = 100°C		20			10						
Typical junction capacitance (Note 1)	Cj	250									PF
Typical thermal resistance (Note 2)	Rth-JA	40									°C/W
Operating junction temperature range	Tj	-55 to +125			-55 to +150						°C
Storage temperature range	Tstg	-55 to +150									°C

Notes:
1. Measured at 1 MHz and applied reverse voltage of 4.0 volts DC.
2. Thermal resistance from junction to lead vertical PCB mounted, 0.5" (12.7mm) lead length.

Ratings and Characteristic Curves of SR320~SR3200

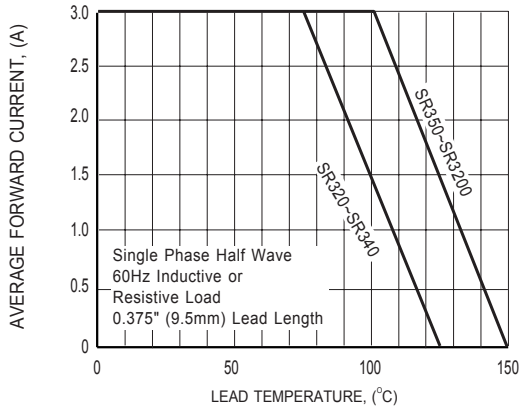


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

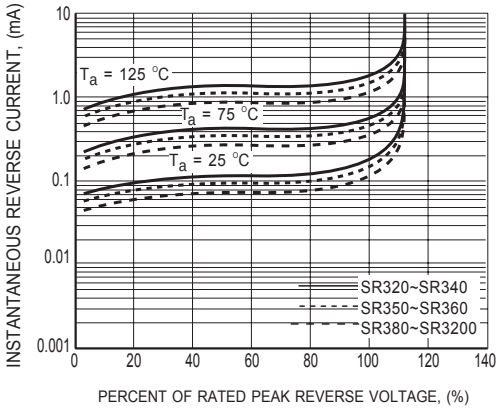


FIG.2 TYPICAL REVERSE CHARACTERISTICS

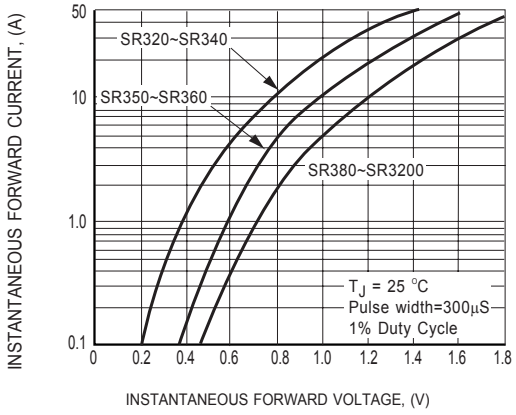


FIG.3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

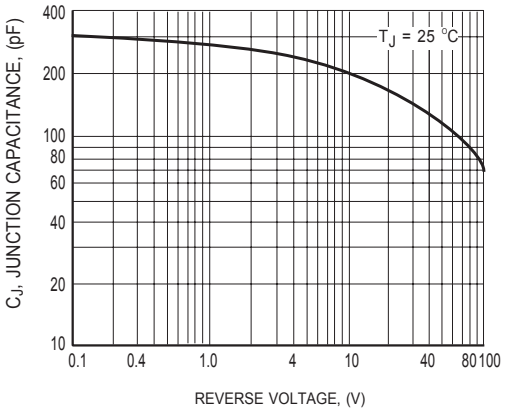


FIG.4 TYPICAL JUNCTION CAPACITANCE

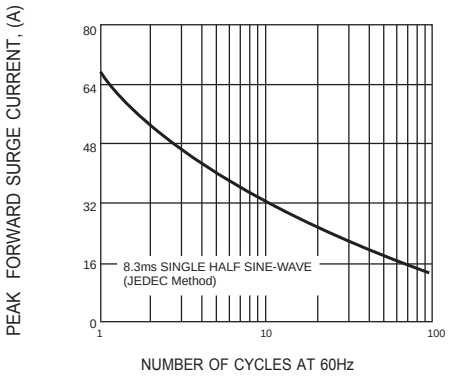


FIG.5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT