

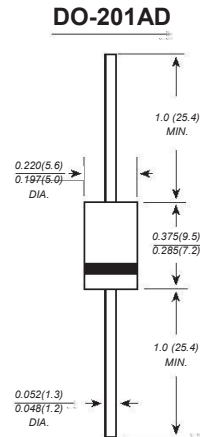
SCHOTTKY BARRIER RECTIFIERS
Reverse Voltage - 20 to 200 V Forward Current - 3 A

Features

- Plastic package has UL flammability classification 94V-0
- Metal silicon junction, majority carrier conduction
- Guard ring for overvoltage protection
- Low power loss, high efficiency
- High current capability, low forward voltage drop
- High surge capability

Mechanical Data

- Case: Molded plastic body, DO-201AD
- Terminals: Plated axial leads, solderable per MIL-STD-750, method 2026
- Polarity: color band denotes cathode end
- Mounting Position: Any



Dimensions in inches and (millimeters)

Absolute Maximum Ratings and Characteristics

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

Parameter	Symbols	SR320	SR330	SR340	SR350	SR360	SR380	SR3100	SR3150	SR3200	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	100	150	200	V
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	70	105	140	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	100	150	200	V
Maximum Average Forward Rectified Current 0.375" (9.5 mm) Lead Length	$I_{F(AV)}$	3									A
Peak Forward Surge Current, 8.3 ms Single Half-Sine-Wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	70									A
Maximum Forward Voltage at 3 A DC	V_F	0.55		0.7		0.85		0.9		0.95	V
Maximum Reverse Current at Rated DC Blocking Voltage	I_R	$T_A = 25\text{ }^\circ\text{C}$	0.5								mA
		$T_A = 100\text{ }^\circ\text{C}$	20		10						
Typical Junction Capacitance ¹⁾	C_J	250									pF
Typical Thermal Resistance ²⁾	$R_{\theta JA}$	40									°C/W
Operating Junction Temperature Range	T_j	- 55 to + 125				- 55 to + 150					°C
Storage Temperature Range	T_{stg}	- 55 to + 150									°C

¹⁾ Measured at 1 MHz and applied reverse voltage of 4 V DC.

²⁾ Thermal resistance from junction to lead vertical P.C.B mounted, 0.5" (12.7 mm) lead length.

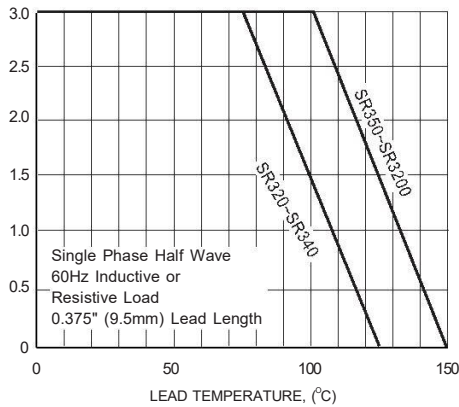


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

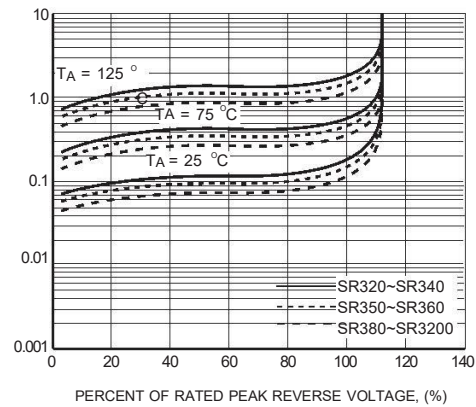


FIG.2 TYPICAL REVERSE CHARACTERISTICS

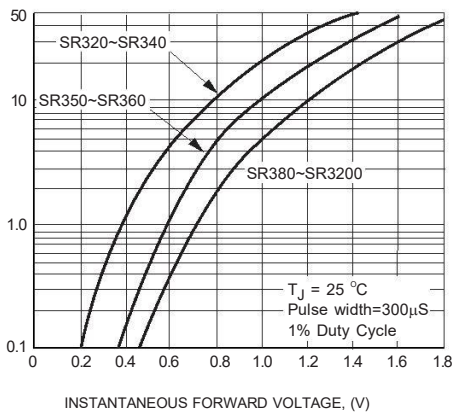


FIG.3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

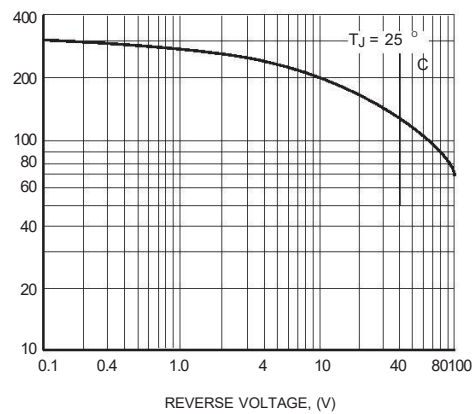


FIG.4 TYPICAL JUNCTION CAPACITANCE

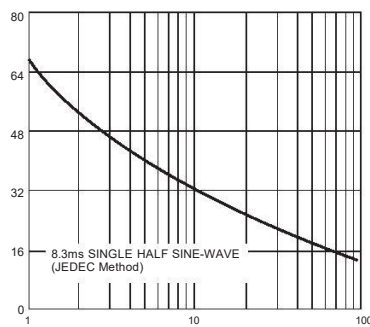


FIG.5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT