JGD

SR302 THRU SR3010

3.0 AMPS. SCHOTTKY BARRIER RECTIFIERS



VOLTAGE RANGE
50 to 1000 Volts
CURRENT
3.0 Amperes

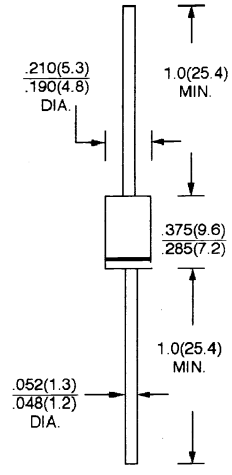
FEATURES

* Low forward voltage drop
* High current capability
* High reliability
* High surge current capability

MECHANICAL DATA

* Case: DO-201 AD Molded plastic
* Epoxy: UL 94V – 0 rate flame retardant
* Lead: Axial leads, solderable per MIL – STD – 202, method 208 guaranteed
* Polarity: Color band denotes cathode end
* Weight: 1.10 grams

DO-201AD



Dimensions in inches and (milimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.
Single phase, half wave, 60 H_Z, resistive or inductive load.
For capacitive load, derate current by 20%

TYPE NUMBER	SYMBOLS	SR302	SR303	SR304	SR305	SR306	SR308	SR3010	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	100	V
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	70	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	100	V
Maximum Average Forward Rectified Current See Fig.1	$I_{F(AV)}$	3.0							A
Peak Forward Surge Current. (8.3 ms, half sine)	I_{FSM}	80							A
Maximum Instantaneous Forward Voltage @ 3.0A(Note 1)	V_F	0.550			0.750		0.850		V
Maximum D.C Reverse Current @ T_A = 25℃ at Rated D.C Blocking Voltage @ T_A = 100℃	I_R	1.0 30							mA
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	20			10				℃/W
Typical Junction Capacitance (Note 3)	C_J	300			250				pF
Operating and Storage Temperature Range	T_J/T_{STG}	– 65 to + 125 / – 65 to + 150							℃

NOTE: (1) Pulse test: 300μs pulse width, 1% duty cycle
(2) Thermal Resistance Junction to Ambient Vertical PC Board Mounted, .0.500" (12.7mm) Lead Length with 2.5 × 2.5" (63.5 × 63.5mm) copper pads.
(3) Measured at 1 MHz and applied reverse voltage of 4.0V D.C.

RATINGS AND CHARACTERISTIC CURVES (SR302 THRU SR3010)

FIG.1 – FORWARD CURRENT DERATING CURVE

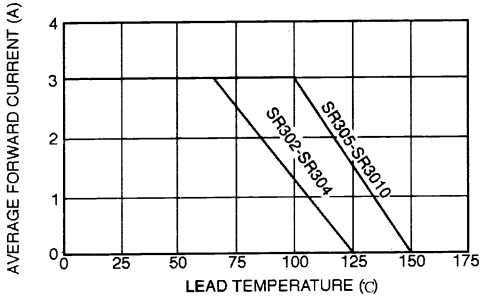


FIG.2 – TYPICAL FORWARD CHARACTERISTICS

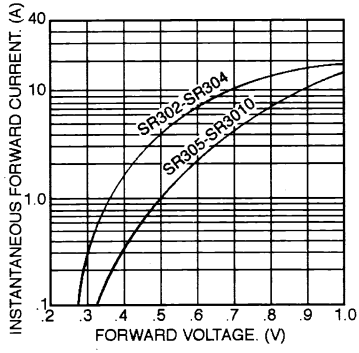


FIG.3 – TYPICAL REVERSE CHARACTERISTICS

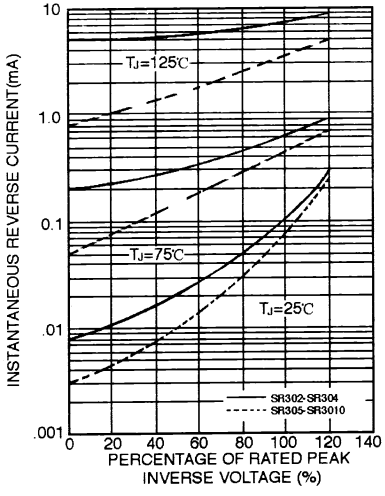


FIG.4 – TYPICAL JUNCTION CAPACITANCE

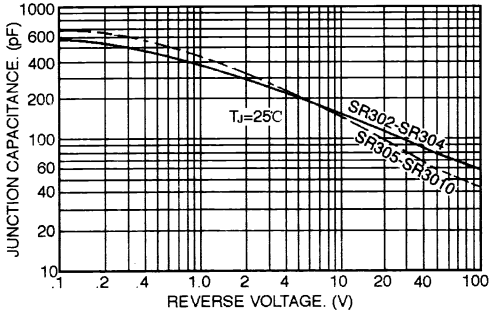


FIG.5 – MAXIMUM NON – REPETITIVE FORWARD SURGE CURRENT

