

5.0AMP SCHOTTKY BARRIER RECTIFIERS- 20~200Volts

DO-201AD PACKAGE

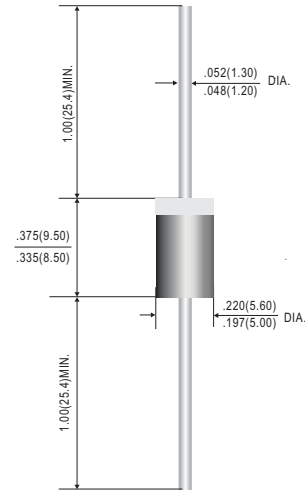


FEATURES

- * High reliability
- * Low switching noise
- * Low forward voltage drop
- * High current capability
- * High switching capability
- * Moisture Sensitivity Level 1
- * RoHs product for packing code suffix "G",
Halogen free product for packing code suffix "H"



DO-201AD



MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-O rate flame retardant
- * Lead: MIL-STD-202E method 208C guaranteed
- * Mounting position: Any
- * Weight: 1.18 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%

RATINGS	SYMBOL	SR520	SR530	SR540	SR550	SR560	SR580	SR5100	SR5150	SR5200	UNIT
Marking Code		SR520	SR530	SR540	SR550	SR560	SR580	SR5100	SR5150	SR5200	
Maximum Recurrent 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 at T _L = 90°C	I _O	5.0									Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	150									Amps
Typical Thermal Resistance (Note 1)	R _{θJA}	18									°C/W
	R _{θJC}	10									°C/W
Typical Junction Capacitance (Note 2)	C _J	200			250			350			pF
Storage and Operating Temperature Range	T _J , T _{STG}	-65 to +125							-65 to +150		°C

CHARACTERISTICS	SYMBOL	SR520	SR530	SR540	SR550	SR560	SR580	SR5100	SR5150	SR5200	UNIT
Maximum Instantaneous Forward Voltage at 5.0A DC(Noye)	V _F	0.55		0.70		0.85		0.87		0.92	Volts
Maximum Average Reverse Current at Rated DC Blocking Voltage	@TA=25°C	0.5									mAmps
	@TA=100°C	10									

- NOTES :1. Thermal Resistance (Junction to Ambient): Vertical PC Board Mounting, 0.5" (12.7mm) Lead Length.
Thermal Resistance (Junction to Case).
2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.
3. Measured at Pulse Width 300µs, Duty Cycle 2%.

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FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

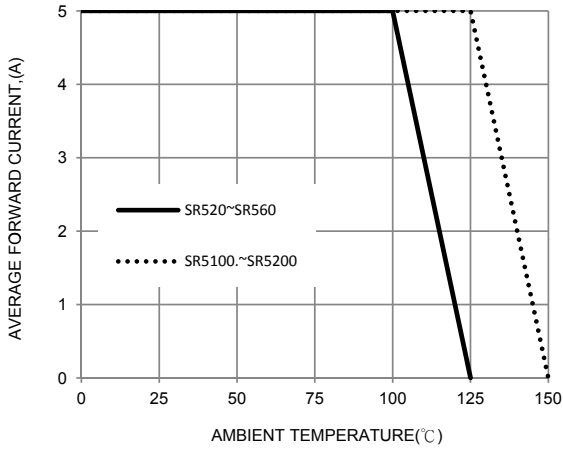


FIG.2 TYPICAL REVERSE CHARACTERISTICS

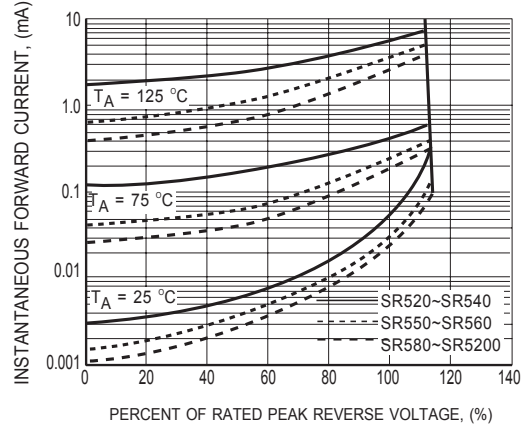


FIG.3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

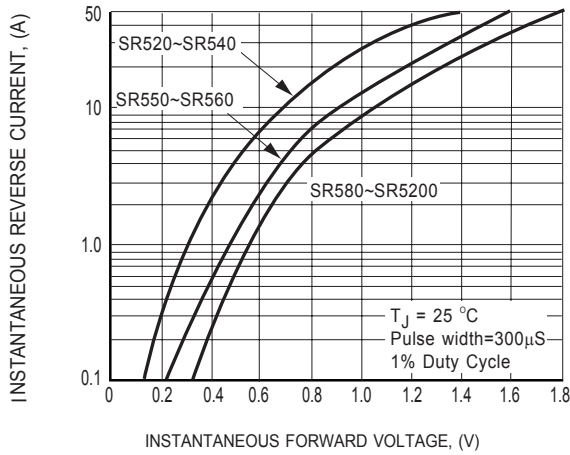


FIG.4 TYPICAL JUNCTION CAPACITANCE

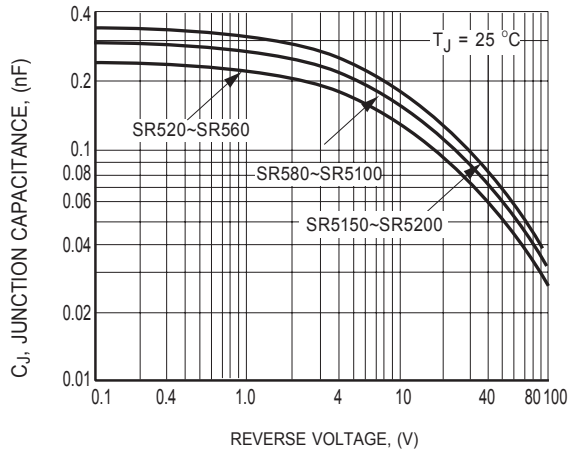


FIG.5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

