DACO SEMICONDUCTOR CO., LTD.

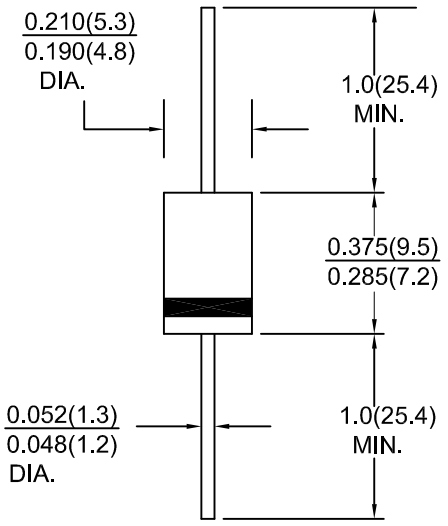
SR320 THRU SR3A0

SCHOTTKY BARRIER RECTIFIERS

FEATURES:

- Low power loss, high efficiency
- High surge current capability
- Low forward voltage drop
- For use in low voltage, high frequency inverters, free wheeling application

DO-201AD



Dimensions in inches and (millimeters)

MECHANICAL DATA

Case : Molded plastic use UL 94V-0 recognized flame retardant epoxy
Terminals : Axial leads, solderable per MIL-STD-202 Method 208
Polarity : Color band on body denotes cathode end
Mounting Position : Any
Weight : 1.1 grams, 0.039 ounce

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

Characteristic	Symbol	SR 320	SR 330	SR 340	SR 350	SR 360	SR 380	SR 3A0	Units
Maximum recurrent peak reverse voltage	V_{RRM}	20	30	40	50	60	80	100	Volts
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	56	70	Volts
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	80	100	Volts
Maximum average forward rectified current	I_O	3.0							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load(JEDEC Method)	I_{FSM}	80							Amps
Maximum instantaneous forward voltage drop at 3.0 A (NOTE 1)	V_F	0.55			0.70		0.85		Volts
Maximum instantaneous reverse current at rated DC blocking voltage (NOTE 1) Ta=25 ° C	I_R	1.5							mA
Ta=100 ° C		20			10				
Typical thermal resistance	R_{th-JA} R_{th-JL}	40.0 10.0							° C/W
Operating junction temperature range	T_j	-65 to +125			-65 to +150				° C
Storage temperature range	T_{stg}	-65 to +150							° C

NOTE :
1.Pulse test: 300 uspulse width, 1% duty cycle
2.Thermal resistance from junction to lead vertical P.C.B mounted , 0.5"(12.7mm) lead length with 2.5X2.5"(63.5mmX63.5mm) copperpads

RATINGS AND CHARACTERISTIC CURVES

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIER CURRENT

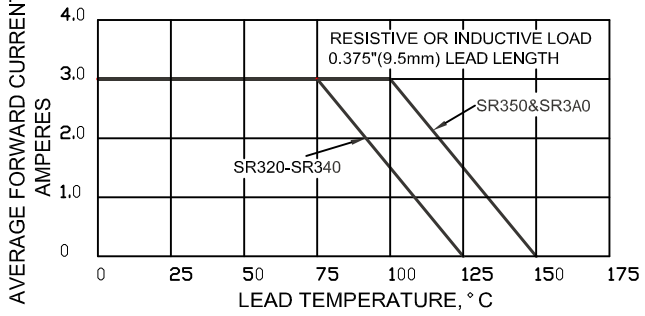


FIG.2-MAXIMUN NON-REPETITIVE PEAK FORWARD SURGE CURRENT

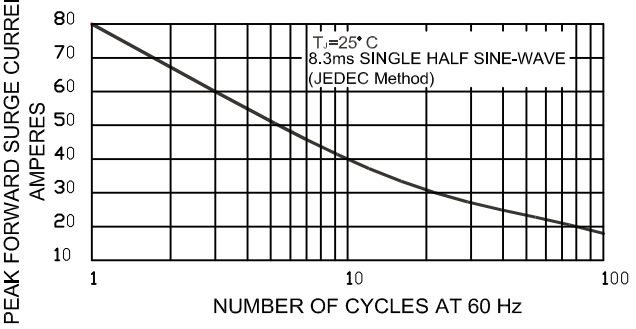


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

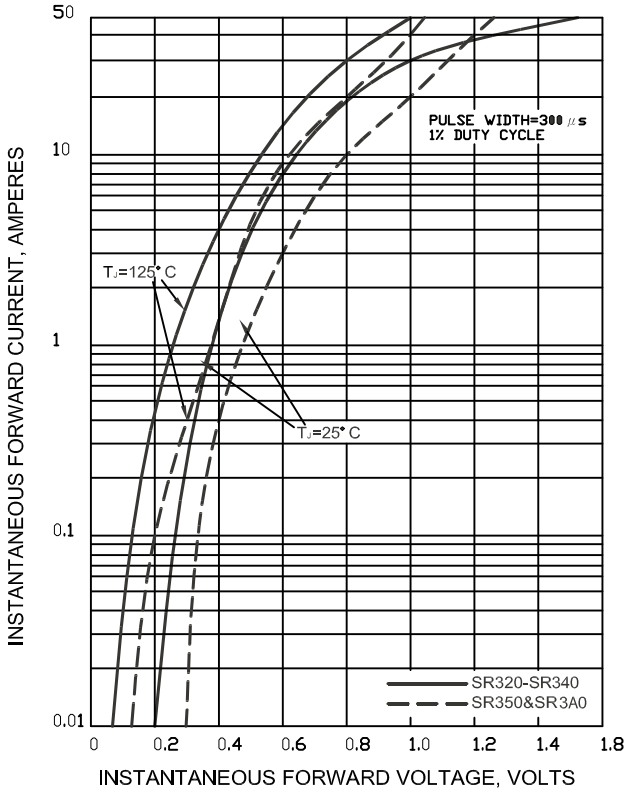


FIG.4-TYPICAL REVERSE CHARACTERISTICS

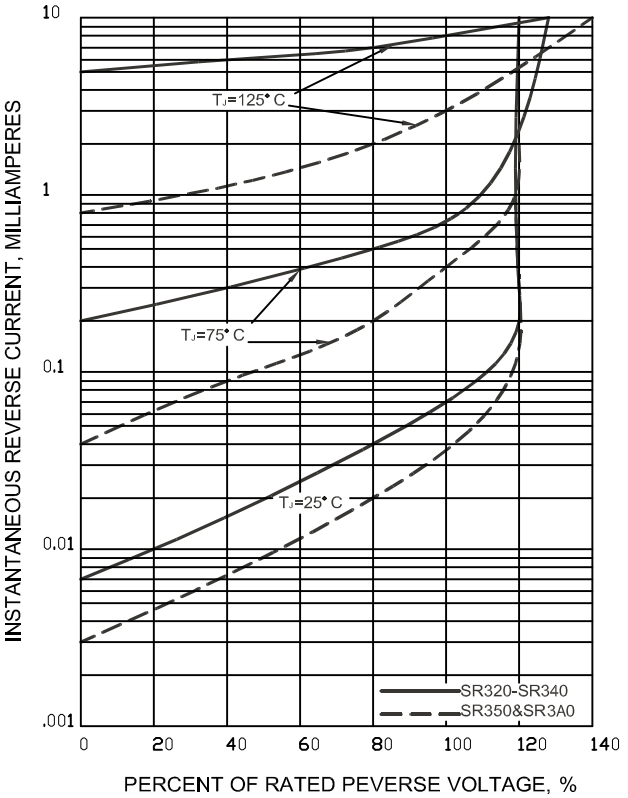


FIG.5-TYPICAL JUNTION CAPACITANCE

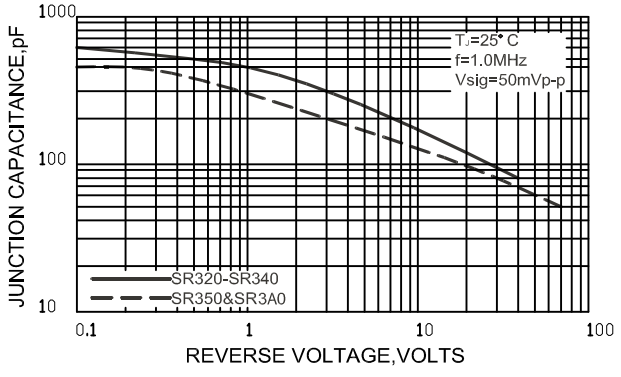
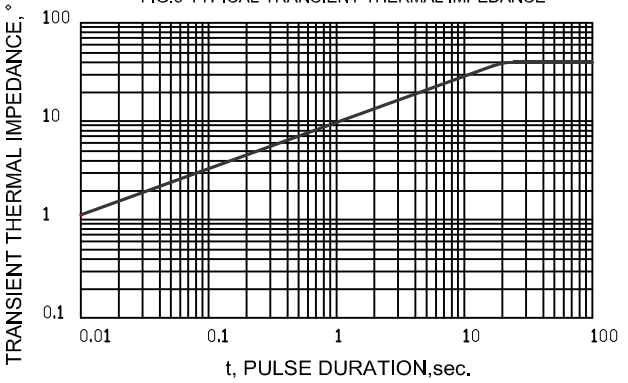


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE



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