DACO SEMICONDUCTOR CO., LTD.

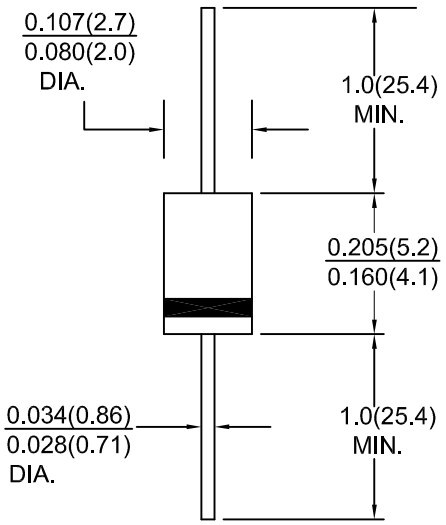
SR120 THRU SR1A0

SCHOTTKY BARRIER RECTIFIERS

FEATURES:

- Plastic package has Underwriters Laboratary Flammability Classification 94V-0
- Guard ring for overvoltage protection
- Low power loss,high efficiency
- High current capability,low forward voltage drop
- High surge capability
- For use in low voltage,high frequency inverters, free wheeling,and polarity protection applications
- High temperature soldering: 250℃/10 second at terminals,0.375:(9.5mm)lead length,5lbs,(2.3kg)tension

DO-204AL(DO-41)



Dimensions in inches and (millimeters)

MECHANICAL DATA

Case: JEDEC DO-41 molded plastic
Terminals: Plated axial lead, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Standard Packaging: Any
Weight:0.012 ounces,0.033 grams

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 120	SR 130	SR 140	SR 150	SR 160	SR 180	SR 1A0	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 voltage	VDC	20	30	40	50	60	80	100	Volts
Maximum average forward rectified current at 0.375"(9.5mm) lead length(See fig.1	$I_{(AV)}$	1.0							Amps
Peak forward surge current,8.3ms single half sine-wave auperimposed on rated load(JEDEC Methed)	I_{FSM}	30							Amps
Maximum instantaneous forward voltage drop per leg at 1.0A (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 Ta=100°C	I_R	0.5 10							mA
Typical thermal resistance (NOTE 3)	$R_{th\ JA}$ $R_{th\ JL}$	50.0 15.0							℃/W
Operating Junction temperature range	T_J	-55 to+125			-55 to+150				℃
Operating Junction and storage temperature range	Tstg	-55 to+150							℃

NOTE : 1.Pulse test :300us width,1%duty cycle:
2.Measured at 1 MHZ and applied reverse voltage of 4.0 volTS
3..Thermal resistance from junction to lead .and/or to ambient P.C.B mounted with 0.375"(9.5mm) lead length with 1.5X1.5"(38X38mm)copper pads

RATINGS AND CHARCTERISTIC CURVES

FIG.1 - MAXIMUM FORWARD CORRENT DERATING CURVE

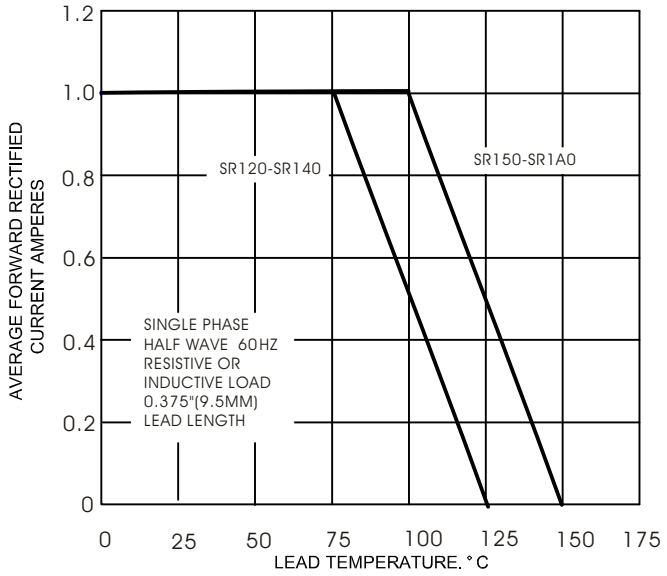


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

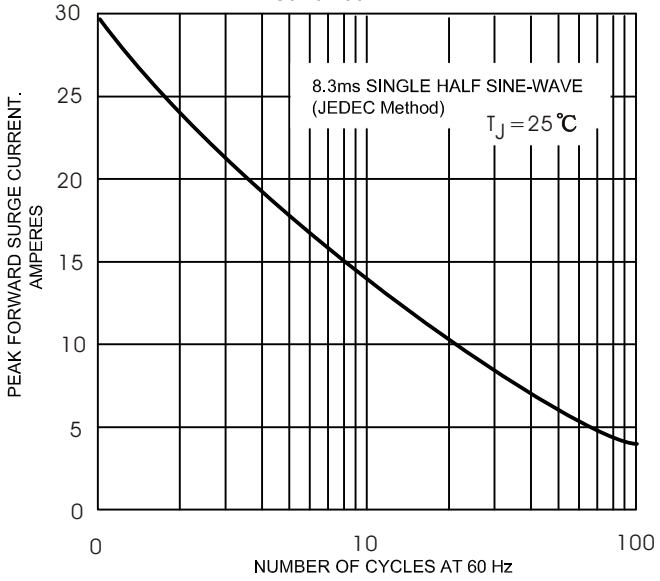


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

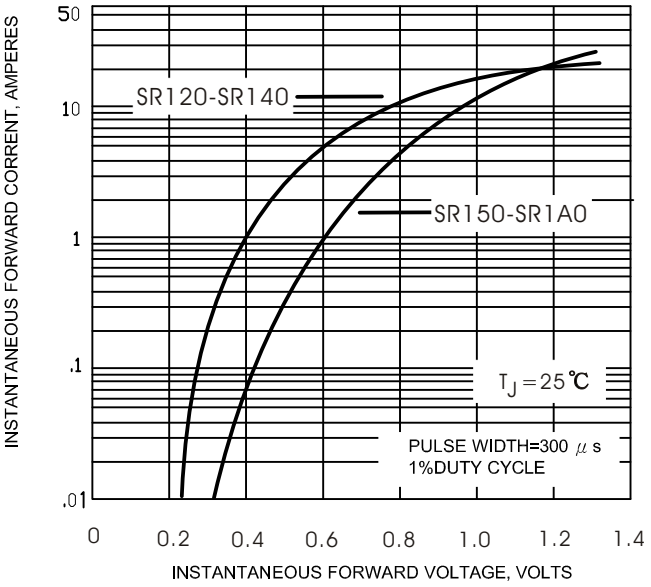
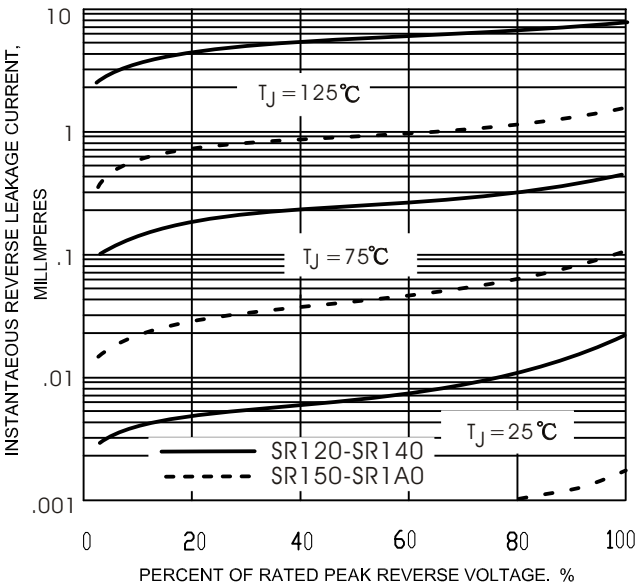


FIG.4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



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