



SR3020~SR3060

SCHOTTKY BARRIER RECTIFIERS

Voltage Range 20 to 60 Volts

Current 30.0 Amperes

Features

- * Plastic package has Underwriters Laboratory Flammability Classification 94V-O.
- Flame Retardant Epoxy Molding Compound.
- * Exceeds environmental standards of MIL-S-19500/228
- * Low power loss, high efficiency.
- * Low forward voltage, high current capability
- * High surge capacity.
- * For use in low voltage, high frequency inverters free wheeling, and polarity protection applications.
- * Pb free products are available : 99% Sn above can meet RoHS environment substance directive request

Mechanical Data

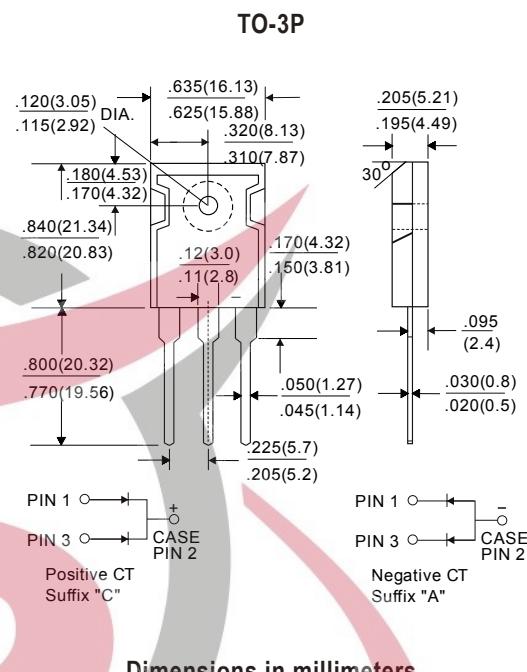
Case: TO-3P Molded plastic

Terminals: Solder plated, solderable per MIL-STD-202G, Method 208

Polarity: As marked.

Standard packaging: Any

Weight: 0.2 ounces, 5.6 grams.



Dimensions in millimeters

Maximum Ratings and Electrical 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	SYMBOL	SR3020	SR3030	SR3035	SR3040	SR3045	SR3050	SR3060	UNITS		
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	35	40	45	50	60	V		
Maximum RMS Voltage	V_{RMS}	14	21	24.5	28	31.5	35	42	V		
Maximum DC Blocking Voltage	V_{DC}	20	30	35	40	45	50	60	V		
Maximum Average Forward Current .375"(9.5mm) lead length at $T_c = 100^\circ C$	I_{AV}	30							A		
Peak Forward Surge Current :8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	275							A		
Maximum Forward Voltage at 15A	V_F	0.55					0.70		V		
Maximum DC Reverse Current TA=25°C at Rated DC Blocking Voltage TA=100°C	I_R	1.0 100							mA		
Maximum Thermal Resistance	R_{QJC}	1.5							°C / W		
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-50 TO +125							°C		

NOTES:

- Both Bonding and Chip structure are available.



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Rating and Characteristic Curves

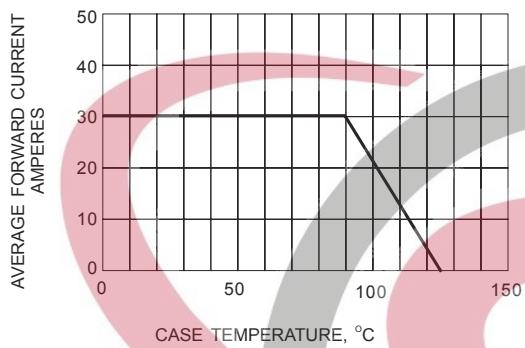


Fig.1- FORWARD CURRENT DERATING CURVE

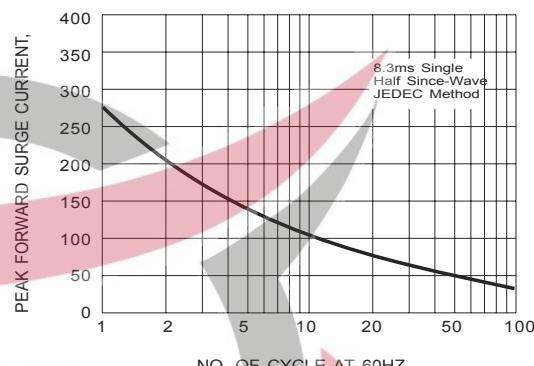


Fig.2- MAXIMUM NON - REPETITIVE SURGE CURRENT

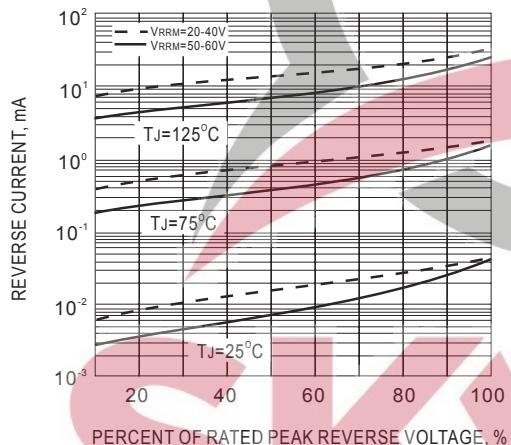


Fig.3- TYPICAL REVERSE CHARACTERISTICS

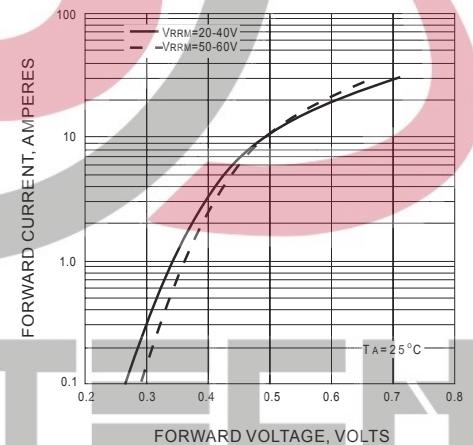


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS