



DATA SHEET SB3020PT~SB3060PT SCHOTTKY BARRIER RECTIFIERS TO-3P 20 to 60 Volts CURRE 30.0 Amperes Unit: inch (mm) VOLTAGE **FEATURES** .640(16.25) 199(5.05) 175(4.45) · Plastic package has Underwriters Laboratory 620(15 75) Flammability Classification 94V-O. .142(3.6) Flame Retardant Epoxy Molding Compound. · Exceeds environmental standards of MIL-S-19500/228 839(21.3) 819(20.8) .600(15.25) .580(14.75) · Low power loss, high efficiency. · Low forwrd voltge, high current capability 087(2.2) 070(1.8) · High surge capacity. · For use in low voltage, high frequency inverters .095(2.4) free wheeling , and polarlity protection applications. 798(20.25) 777(19.75) 170(4.3) 145(3.7) .126(3.2) • Pb free product are available : 99% Sn abovecan meet Rohs environment substance directive request .050(1.25) .030(0.75) 1 0 3 **MECHANICALDATA** .225(5.7) 225(5.7) 204(5.2) Case: TO-3P Molded plastic AC 1)-Terminals: Solder plated, solderable per MIL-STD-202G, Method 208 Positive CT -(2) Polarity: As marked. AC 3-Standard packaging: Any Weight: 0.2 ounces, 5.6grams.

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	SB30 20PT	SB30 30PT	SB30 35PT	SB30 40PT	SB30 45PT	SB30 50PT	SB30 60PT	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 a t Tc =100	IAV	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	VF	0.55 0.70						V	
Maximum DC Reverse Current TA=25 at Rated DC Blocking Voltage TA=100	I _R	1.0 100							mA
Maximum Thermal Resistance	Rajc	1.5							/ W
Operating Junction and Storage Temperature Range	T_J, T_{STG}	- 50 to + 125							

NOTES:

Both Bonding and Chip structure are available.



RATING AND CHARACTERISTIC CURVES



Fig.1- FORWARD CURRENT DERATING CURVE



Fig.3- TYPICAL REVERSE CHARACTERISTICS



Fig.2- MAXIMUM NON - REPETITIVE SURGE CURRENT



Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS