

SBL3030PT ~ SBL3040PT

PRV : 30 ~ 40 Volts
Io : 30 Amperes

FEATURES :

- * Plastic package has Underwriters Laboratory Flammability Classifications 94V-0
- * Dual rectifier construction, positive center tap
- * Metal silicon junction, majority carrier conduction
- * Low power loss, high efficiency
- * High current capability, low forward voltage drop
- * High surge capability
- * Guardring for overvoltage protection
- * For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- * High temperature soldering : 250°C/10 seconds, 0.25" (6.35mm) from case
- * **Pb / RoHS Free**

MECHANICAL DATA :

- * Case : TO-247AD Molded plastic
- * Polarity : As marked on the body
- * Mounting position : Any
- * Weight : 5.6 grams

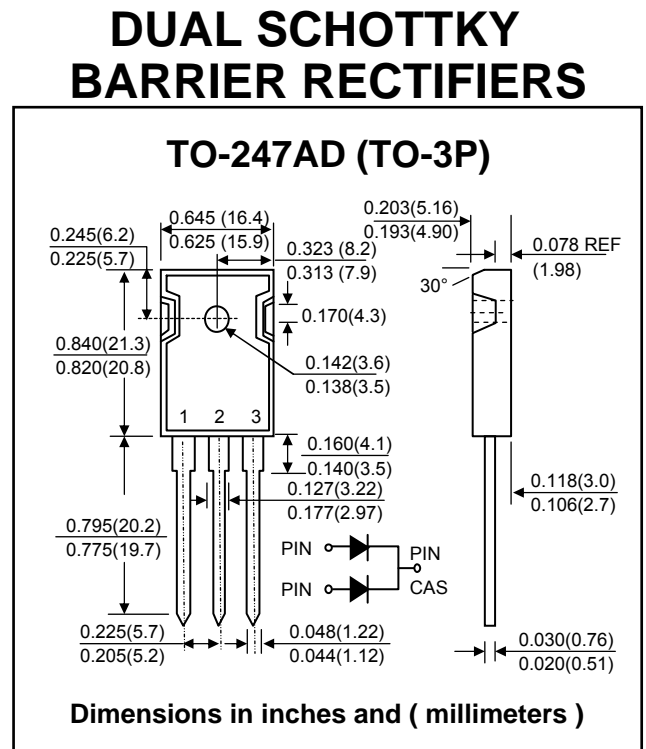
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.

PARAMETER	SYMBOL	SBL3030PT	SBL3040PT	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	30	40	V
Maximum Working Peak Reverse Voltage	V_{RWM}	21	28	V
Maximum DC Blocking Voltage	V_{DC}	30	40	V
Maximum Average Forward Rectified Current at $T_C = 100\text{ }^\circ\text{C}$	$I_{F(AV)}$	30		A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method) Per leg	I_{FSM}	275		A
Maximum Instantaneous Forward Voltage at 15 A (Note 1)	V_F	0.55		V
Maximum Instantaneous Reverse Current $T_C = 25\text{ }^\circ\text{C}$	I_R	1.0		mA
Per leg at Rate DC Blocking Voltage (Note 1) $T_C = 100\text{ }^\circ\text{C}$		75		
Typical Thermal Resistance (Junction to Case) Per Leg	$R_{\theta JC}$	1.5		$^\circ\text{C/W}$
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-40 to + 125		$^\circ\text{C}$

Note :

(1) Pulse test : 300 μs pluse width, 1% duty cycle



RATING AND CHARACTERISTIC CURVES (SBL3030PT ~ SBL3040PT)

FIG.1 - FORWARD CURRENT DERATING CURVE

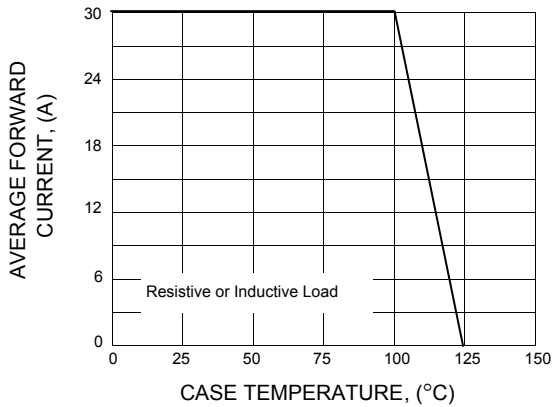


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

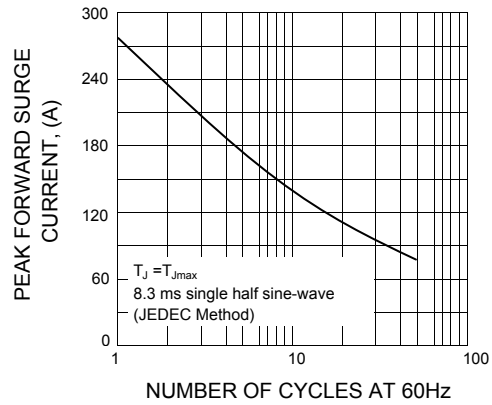


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG

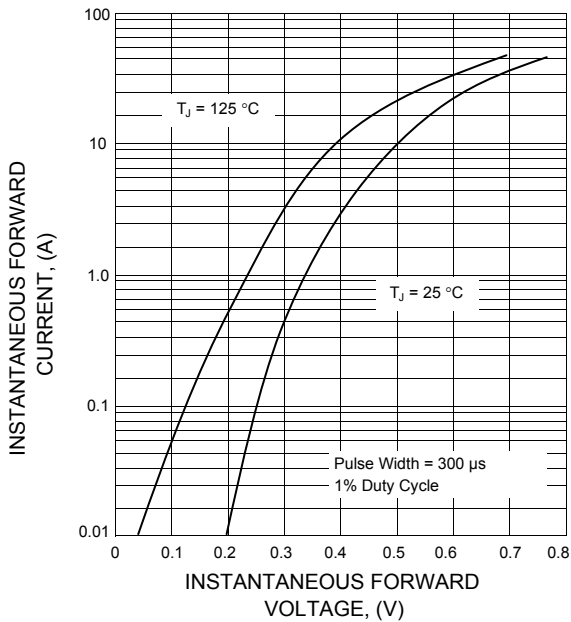


FIG.4 - TYPICAL REVERSE CHARACTERISTICS PER LEG

