

SBL3030PT ~ SBL3060PT

PRV : 30 ~ 60 Volts
Io : 30 Amperes

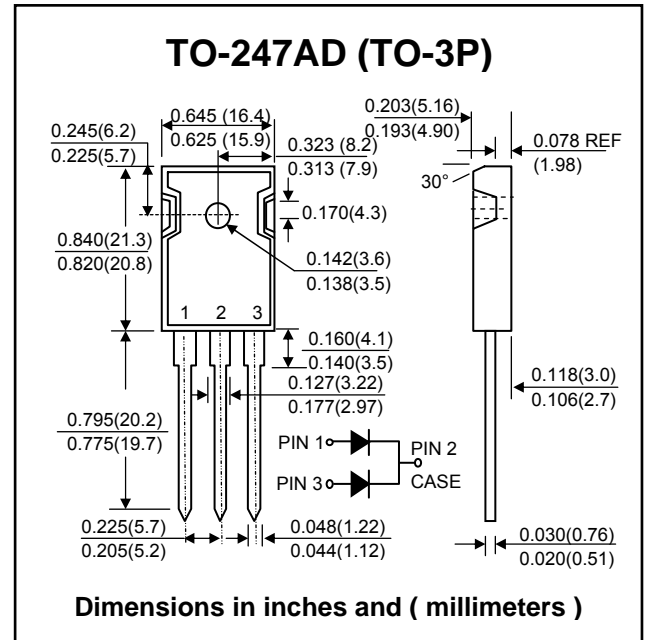
FEATURES :

- * 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
- * **Pb / RoHS Free**

MECHANICAL DATA :

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

DUAL SCHOTTKY BARRIER RECTIFIERS



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.

PARAMETER	SYMBOL	SBL30 30PT	SBL30 35PT	SBL30 40PT	SBL30 45PT	SBL30 50PT	SBL30 60PT	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	30	35	40	45	50	60	V
Maximum Working Peak Reverse Voltage	V_{RWM}	30	35	40	45	50	60	V
Maximum DC Blocking Voltage	V_{DC}	30	35	40	45	50	60	V
Maximum RMS Reverse Voltage	$V_{R(RMS)}$	21	24.5	28	31.5	35	42	V
Maximum Average Forward Rectified Current at $T_C = 95\text{ }^\circ\text{C}^{(1)}$	$I_{F(AV)}$	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 Forward Voltage at $I_F = 15A, T_C = 25\text{ }^\circ\text{C}$	V_F	0.55				0.70		V
Maximum Instantaneous Reverse Current at Rate DC Blocking Voltage	I_R	1.0						mA
$T_C = 100\text{ }^\circ\text{C}$		75						
Typical Total Capacitance (Note 2)	C_T	1100.0						pF
Typical Thermal Resistance Junction to Case (Note 1)	$R_{\theta JC}$	1.5						$^\circ\text{C/W}$
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-65 to + 150						$^\circ\text{C}$

Notes :

- (1) Thermal resistance junction to case mounted on heatsink.
- (2) Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

RATING AND CHARACTERISTIC CURVES (SBL3030PT ~ SBL3060PT)

FIG.1 - FORWARD CURRENT DERATING CURVE

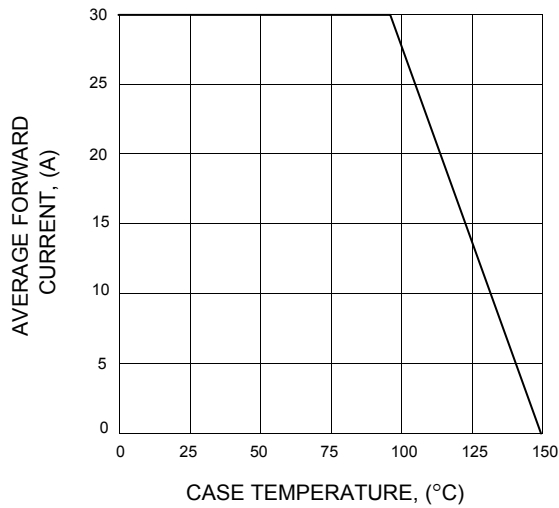


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

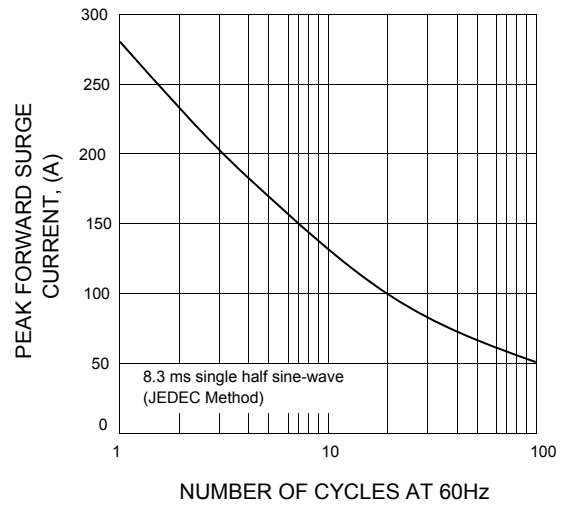


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER ELEMENT

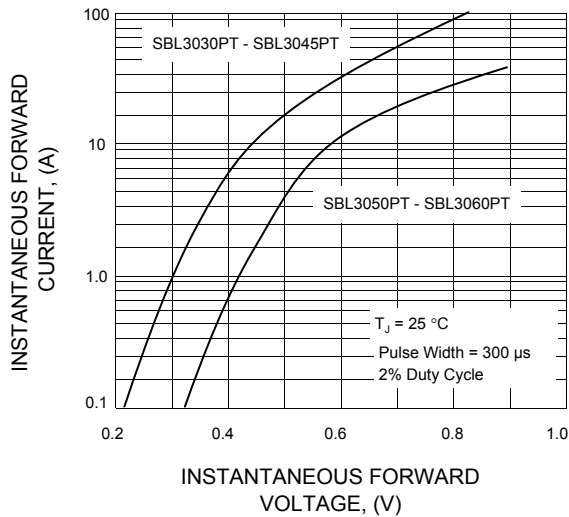


FIG.4 - TYPICAL REVERSE CHARACTERISTICS PER ELEMENT

