

SBL1030CT ~ SBL1040CT

PRV : 30 ~ 40 Volts
Io : 10 Amperes

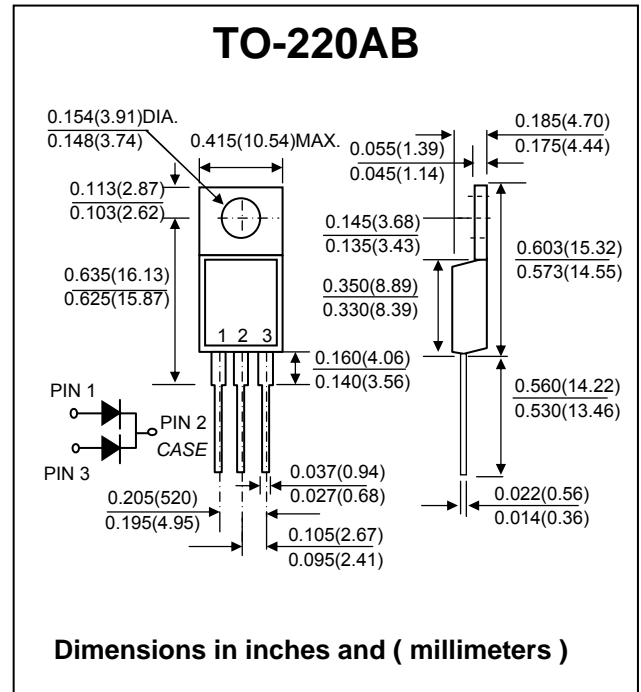
FEATURES :

- * 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
- * Guardring for overvoltage protection
- * For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- * **Pb / RoHS Free**

MECHANICAL DATA :

- * Case : JEDEC TO-220AB molded plastic body
- * Terminals: Plated leads, solderable per MIL-STD-750 Method 2026
- * Polarity: As marked
- * Mounting Position: Any
- * Weight : 2.24 grams (Approximately)

DUAL SCHOTTKY BARRIER RECTIFIERS



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS ($T_c = 25^\circ\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	SBL1030CT	SBL1040CT	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 <i>Total device</i> at $T_c = 107^\circ\text{C}$ <i>Per leg</i>	$I_{F(AV)}$	10 5.0		A
Peak Forward Surg Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method) Per leg	I_{FSM}	175		A
Maximum Instantaneous Forward Voltage at 5.0A (Note 1)	V_F	0.55		V
Maximum Instantaneous Reverse Current $T_c = 25^\circ\text{C}$ Per leg at Rate DC Blocking Voltage (Note 1) $T_c = 100^\circ\text{C}$	I_R	0.5 50		mA
Typical Thermal Resistance (Junction to Case) Per Leg	$R_{\theta JC}$	3.0		$^\circ\text{C/W}$
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 (SBL1030CT ~ SBL1040CT)

FIG.1 - FORWARD CURRENT DERATING CURVE

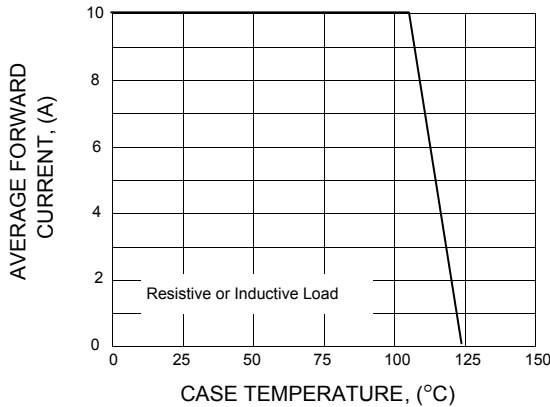


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

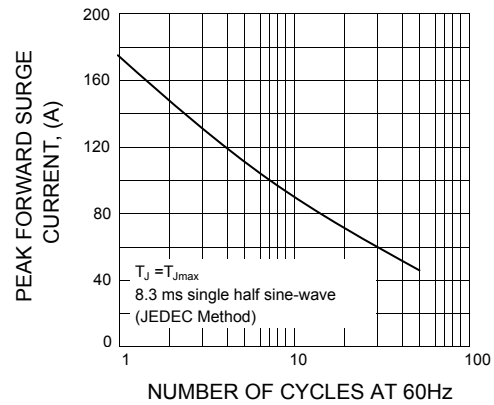


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG

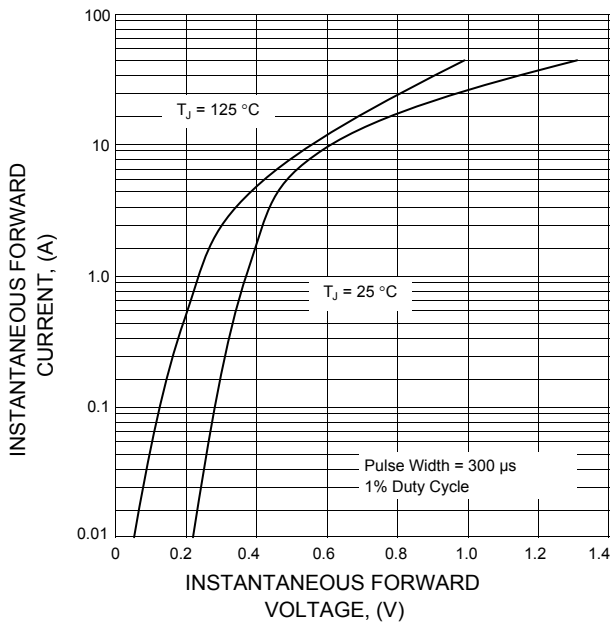


FIG.4 - TYPICAL REVERSE CHARACTERISTICS PER LEG

