

# SBL1030CT ~ SBL1040CT

**PRV : 30 ~ 40 Volts**  
**Io : 10 Amperes**

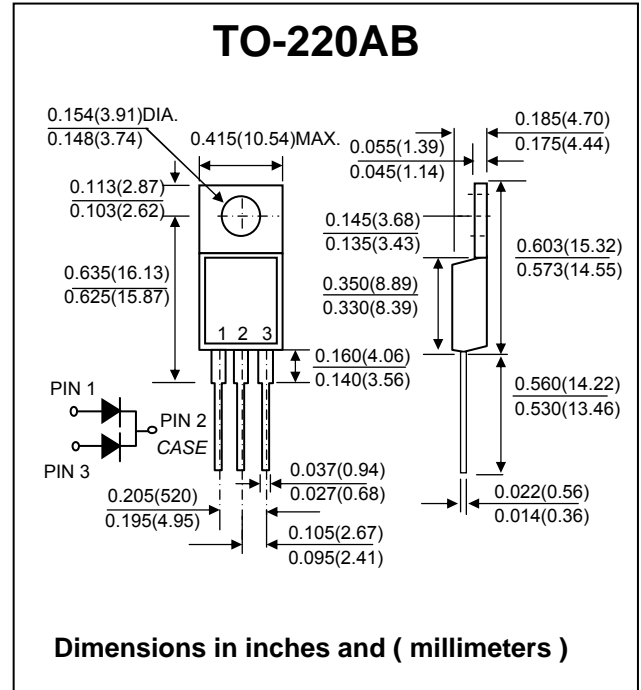
## FEATURES :

- \* 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 )

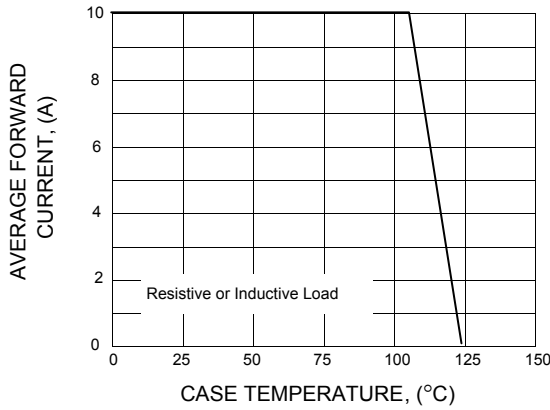
PARAMETER	SYMBOL	SBL1030CT	SBL1040CT	UNIT
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	30	40	V
Maximum Working Peak Reverse Voltage	$V_{RWM}$	21	28	V
Maximum DC Blocking Voltage	$V_{DC}$	30	40	V
Maximum Average Forward Rectified Current <i>Total device</i> at $T_c = 107^\circ\text{C}$ <i>Per leg</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 :

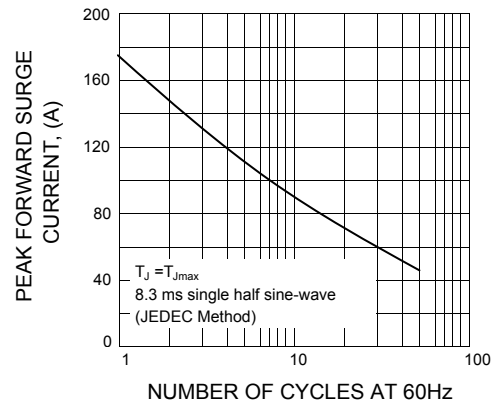
(1) Pulse test : 300  $\mu\text{s}$  pluse width, 1% duty cycle

**RATING AND CHARACTERISTIC CURVES ( SBL1030CT ~ SBL1040CT )**

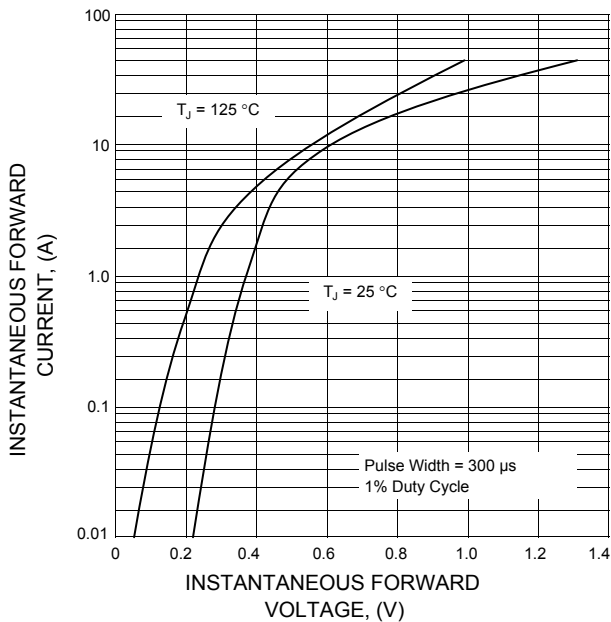
**FIG.1 - FORWARD CURRENT DERATING CURVE**



**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**

