

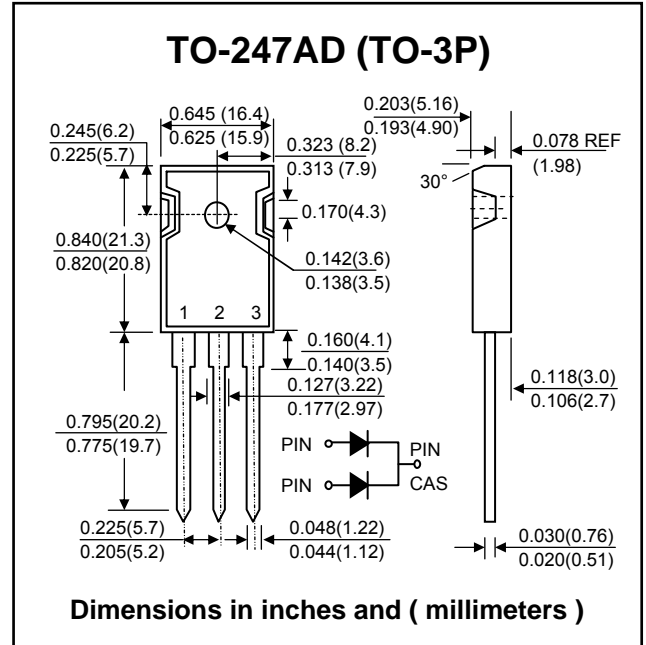
# SBL4030PT ~ SBL4040PT

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

## DUAL SCHOTTKY BARRIER RECTIFIERS



## 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.

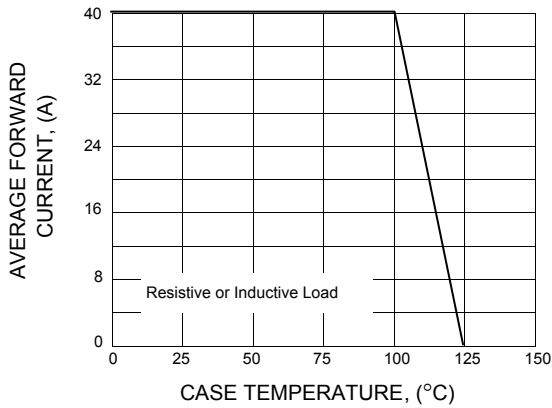
PARAMETER	SYMBOL	SBL4030PT	SBL4040PT	UNIT
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	30	40	V
Maximum Working Peak Reverse Voltage	$V_{RWM}$	21	28	V
Maximum DC Blocking Voltage	$V_{DC}$	30	40	V
Maximum Average Forward Rectified Current at $T_C = 100\text{ }^\circ\text{C}$	$I_{F(AV)}$	40		A
Peak Forward Surg Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method) Per leg	$I_{FSM}$	400		A
Maximum Instantaneous Forward Voltage at 20 A (Note 1)	$V_F$	$T_C = 25\text{ }^\circ\text{C}$	0.58	V
		$T_C = 100\text{ }^\circ\text{C}$	0.5	
Maximum Instantaneous Reverse Current Per leg at Rate DC Blocking Voltage (Note 1)	$I_R$	$T_C = 25\text{ }^\circ\text{C}$	10	mA
		$T_C = 100\text{ }^\circ\text{C}$	100	
Typical Thermal Resistance (Junction to Case) Per Leg	$R_{\theta JC}$	1.2		$^\circ\text{C/W}$
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	-40 to + 125		$^\circ\text{C}$

### Note :

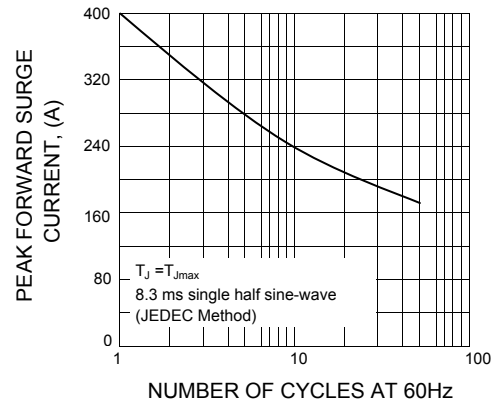
(1) Pulse test : 300  $\mu\text{s}$  pluse width, 1% duty cycle

**RATING AND CHARACTERISTIC CURVES ( SBL4030PT ~ SBL4040PT )**

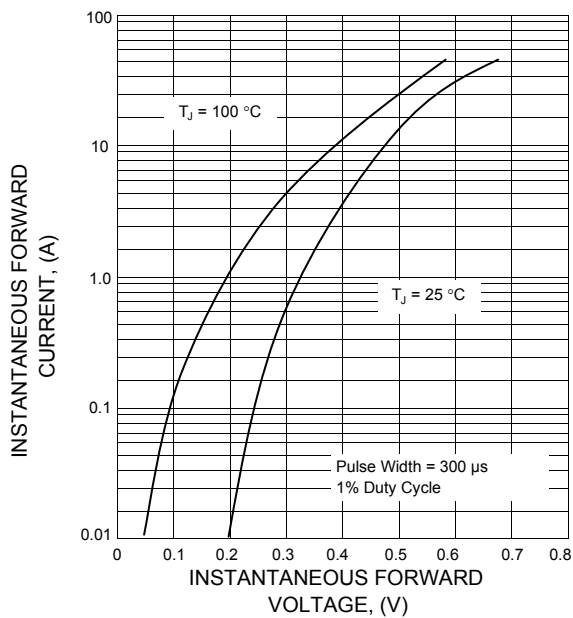
**FIG.1 - FORWARD CURRENT DERATING CURVE**



**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**

