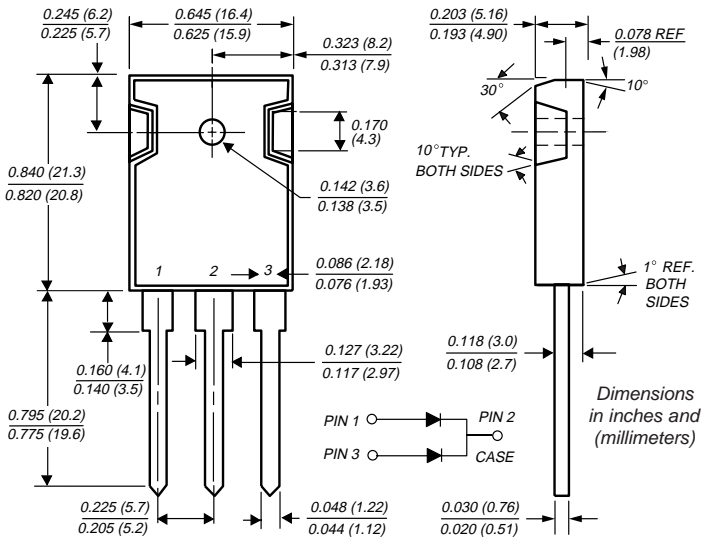
**Dual Schottky Rectifier****Reverse Voltage** 30 and 40V  
**Forward Current** 30A**TO-247AD (TO-3P)****Features**

- 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
- For use in low voltage, high frequency inverters, free-wheeling, and polarity protection applications
- Guardring for overvoltage protection
- High temperature soldering guaranteed: 250°C/10 seconds, 0.17" (4.3mm) from case

**Mechanical Data****Case:** JEDEC TO-247AD molded plastic body**Terminals:** Lead solderable per MIL-STD-750, Method 2026**Polarity:** As marked**Mounting Position:** Any**Mounting Torque:** 10 in-lbs max.**Weight:** 0.2 oz., 5.6 g**Maximum Ratings & Thermal Characteristics**

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	SBL3030PT	SBL3040PT	Unit
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	30	40	V
Maximum RMS voltage	V <sub>RWM</sub>	21	28	V
Maximum DC blocking voltage	V <sub>DC</sub>	30	40	V
Maximum average forward rectified current (SEE FIG. 1)	I <sub>F(AV)</sub>	30		A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	275		A
Thermal resistance from junction to case per leg	R <sub>θJC</sub>	1.5		°C/W
Operating junction and storage temperature range	T <sub>J</sub> , T <sub>STG</sub>	-40 to +125		°C

**Electrical Characteristics**

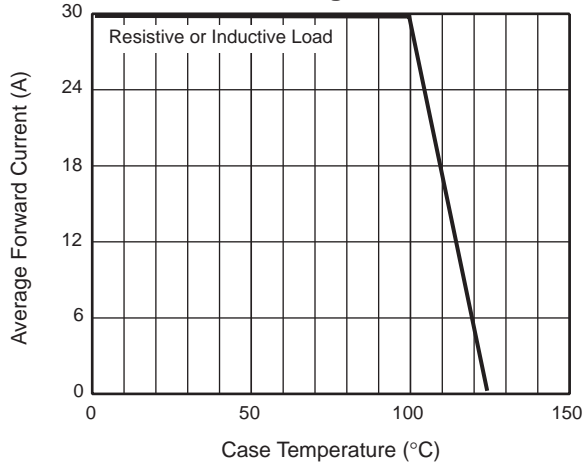
Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	SBL3030PT	SBL3040PT	Unit
Maximum instantaneous forward voltage per leg at: 15A (NOTE 1)	V <sub>F</sub>	0.55		V
Maximum instantaneous reverse current at rated DC blocking voltage per leg (NOTE 1)	I <sub>R</sub>	1.0 75		mA

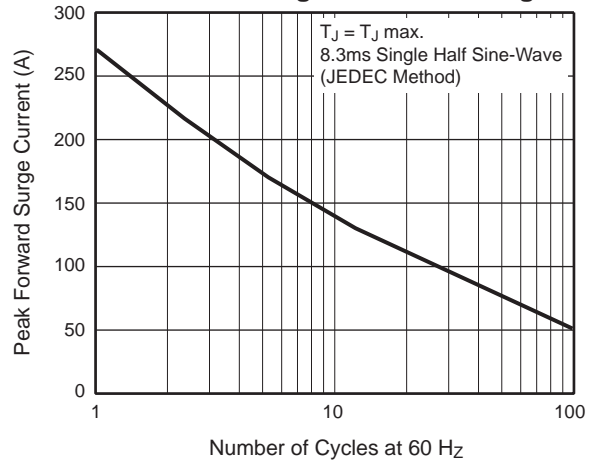
**Notes:** (1) Pulse test: 300μs pulse width, 1% duty cycle

## Ratings and Characteristic Curves ( $T_A = 25^\circ\text{C}$ unless otherwise noted)

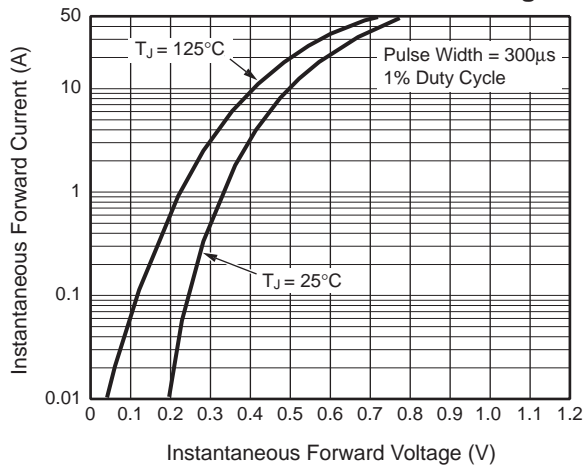
**Fig. 1 – Forward Current Derating Curve**



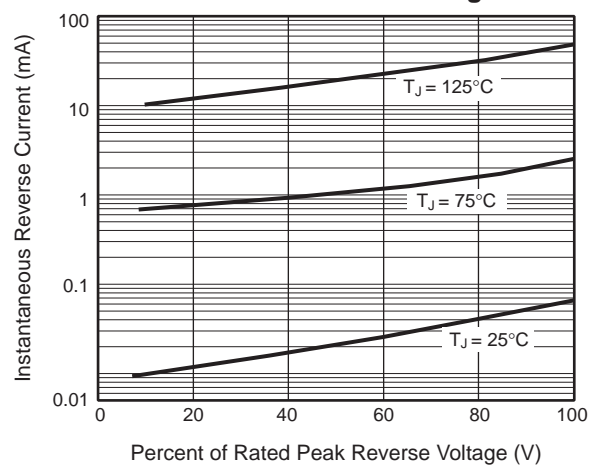
**Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current Per Leg**



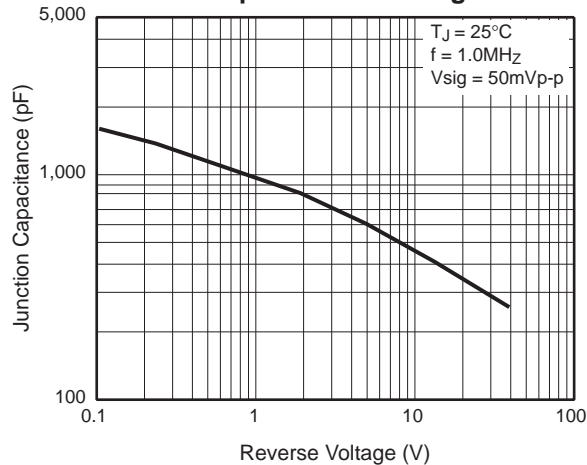
**Fig. 3 – Typical Instantaneous Forward Characteristics Per Leg**



**Fig. 4 – Typical Reverse Characteristics Per Leg**



**Fig. 5 – Typical Junction Capacitance Per Leg**



**Fig. 6 – Typical Transient Thermal Impedance Per Leg**

