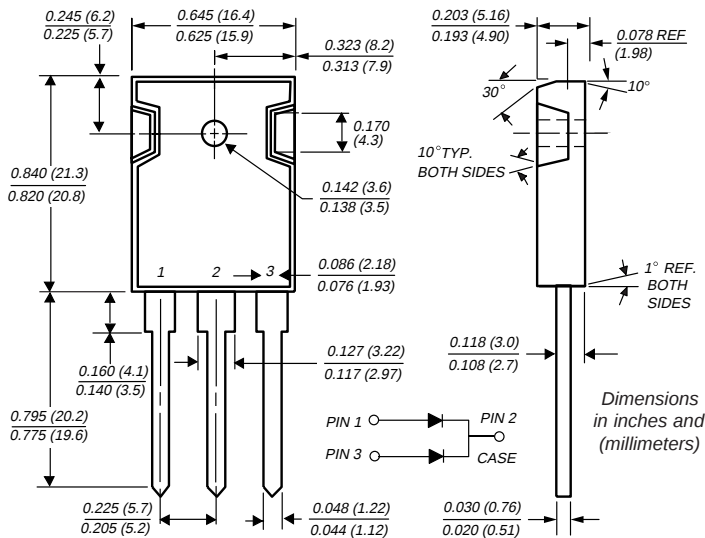
**Dual Schottky Barrier Rectifier****Reverse Voltage** 30 and 40V
Forward Current 20A**TO-247AD****Features**

- 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

Mechanical Data**Case:** JEDEC TO-247AD molded plastic body**Terminals:** Lead solderable per MIL-STD-750, Method 2026High temperature soldering guaranteed:
250°C/10 seconds, 0.17" (4.3mm) from case**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	SBL2030PT	SBL2040PT	Unit
Maximum repetitive peak reverse voltage	V _{RRM}	30	40	V
Maximum RMS voltage	V _{RWM}	21	28	V
Maximum DC blocking voltage	V _{DC}	30	40	V
Maximum average forward rectified current (See Fig. 1)	I _{F(AV)}	20		A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	250		A
Thermal resistance from junction to case per leg	R _{θJC}	1.5		°C/W
Operating junction and storage temperature range	T _J , T _{STG}	-40 to +125		°C

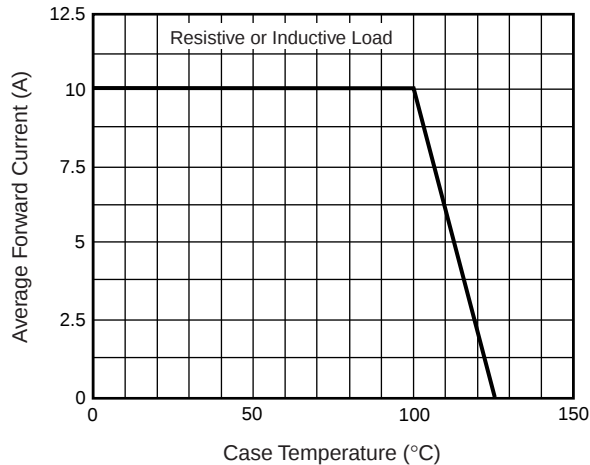
Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	SBL2030PT	SBL2040PT	Unit
Maximum instantaneous forward voltage per leg at 10A ⁽¹⁾	V _F	0.60		V
Maximum instantaneous reverse current at T _C = 25°C rated DC blocking voltage per leg ⁽¹⁾ T _C = 100°C	I _R	1.0 50		mA

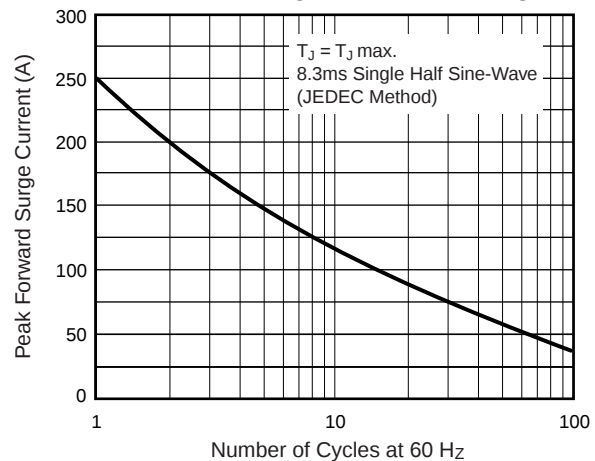
Notes: (1) Pulse test: 300μs pulse width, 1% duty cycle

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

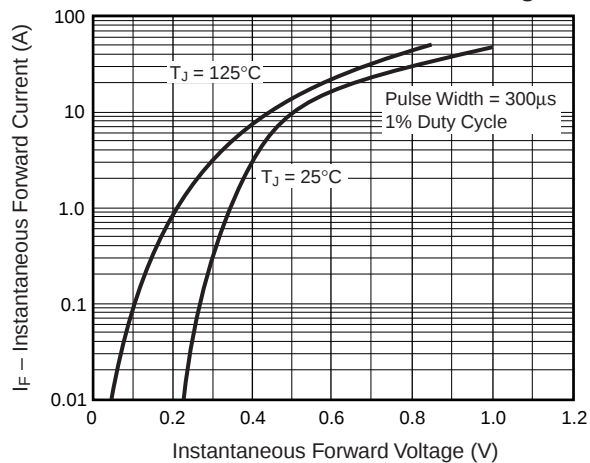
Forward Current Derating Curve



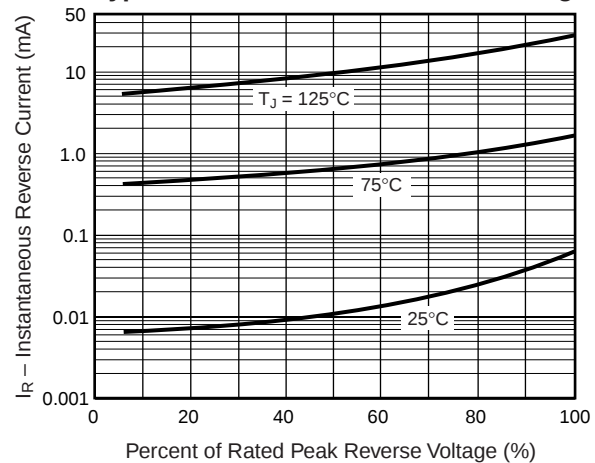
Maximum Non-Repetitive Peak Forward Surge Current Per Leg



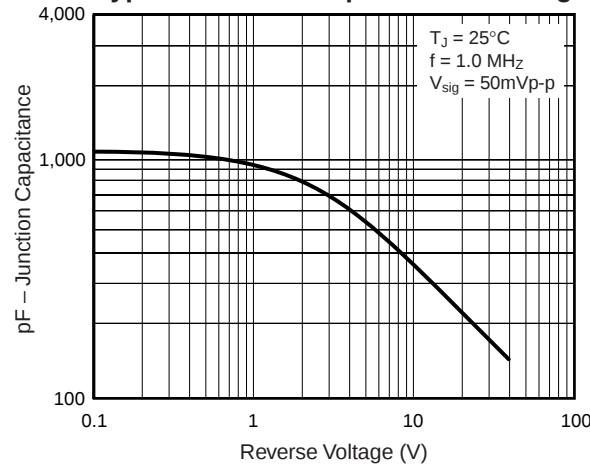
Typical Instantaneous Forward Characteristics Per Leg



Typical Reverse Characteristics Per Leg



Typical Junction Capacitance Per Leg



Typical Transient Thermal Impedance Per Leg

