

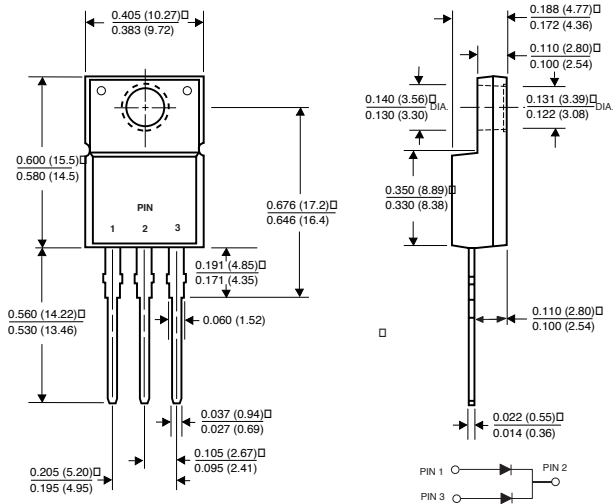
SBLF1030CT AND SBLF1040CT

SCHOTTKY ISOLATED PLASTIC RECTIFIER

Reverse Voltage - 30 and 40 Volts

Forward Current - 10.0 Amperes

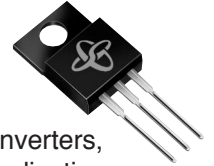
ITO-220AB



Dimensions in inches and (millimeters)

FEATURES

- ◆ Isolated plastic package has Underwriters Laboratory Flammability Classifications 94V-0
- ◆ Metal silicon junction, majority carrier conduction
- ◆ Low power loss, high efficiency
- ◆ High current capability, low forward voltage drop
- ◆ High surge capacity
- ◆ 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, 0.25" (6.35mm) from case



MECHANICAL DATA

Case: JEDEC ITO-220AB fully overmolded plastic body**Terminals:** Lead solderable per MIL-STD-750, Method 2026**Polarity:** As marked**Mounting Position:** Any**Mounting Torque:** 5 in. - lbs max.**Weight:** 0.08 ounce, 2.24 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	SBLF1030CT	SBLF1040CT	UNITS
Maximum repetitive peak reverse voltage	VRRM	30	40	Volts
Maximum RMS voltage	VRMS	21	28	Volts
Maximum DC blocking voltage	VDC	30	40	Volts
Maximum average forward rectified current at TC=95°C	l(AV)	10.0		Amps
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	175.0		Amps
Maximum instantaneous forward voltage per leg at 5.0A (NOTE 1)	VF	0.55		Volts
Maximum instantaneous reverse current at rated DC blocking voltage (NOTE 1)	IR	0.5 50.0		mA
		TC=25°C TC=100°C		
Typical thermal resistance (NOTE 2)	RθJC	5.0		°C/W
Operating and storage temperature range	TJ, TSTG	-40 to +125		°C
RMS Isolation voltage from terminals to heatsink with RH ≤ 30%	VISOL	4500 (NOTE 3) 3500 (NOTE 4) 1500 (NOTE 5)		Volts

NOTES:

- (1) Pulse test: 300 μs pulse width, 1% duty cycle
- (2) Thermal resistance from junction to case per leg
- (3) Clip mounting (on case), where lead does not overlap heatsink with 0.110" offset.
- (4) Clip mounting (on case), where leads do overlap heatsink.
- (5) Screw mounting with 4-40 screw, where washer diameter is ≤ 4.9 mm (0.19").

RATINGS AND CHARACTERISTIC CURVES SBLF1030CT AND SBLF1040CT

FIG. 1 - FORWARD CURRENT DERATING CURVE

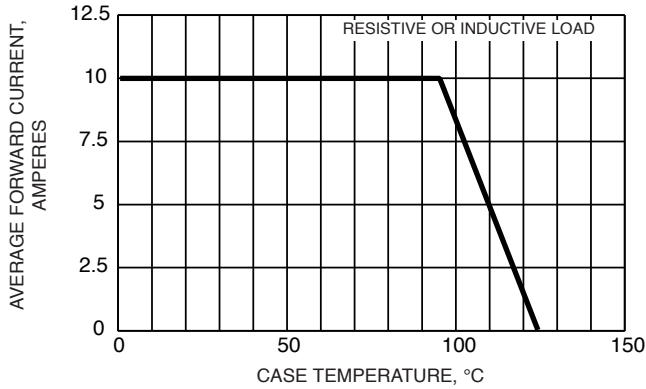


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

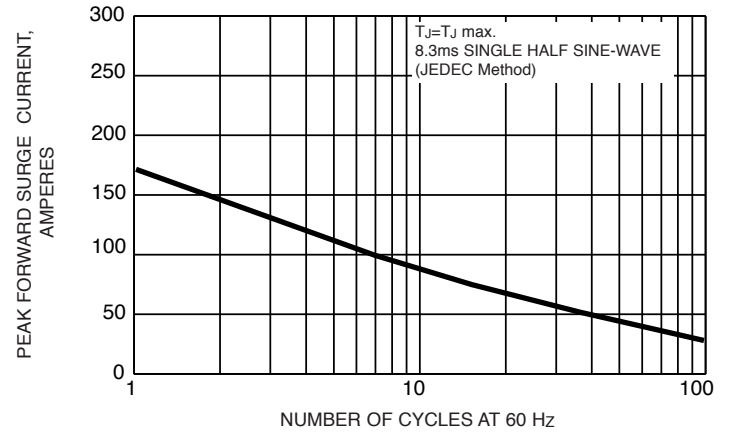


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG

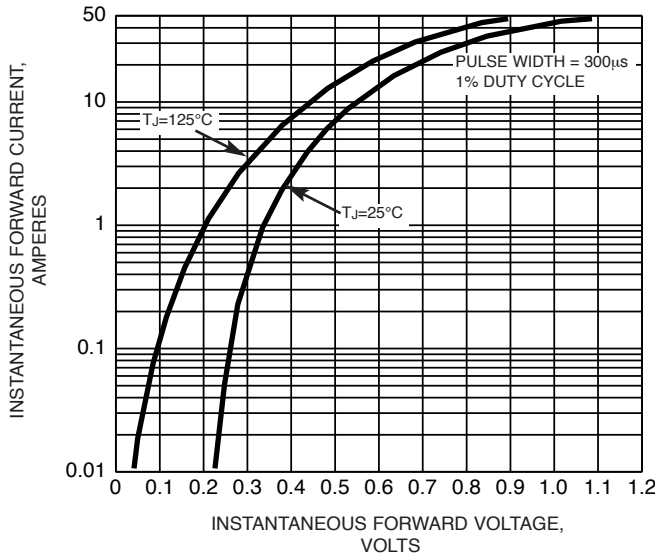


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS PER LEG

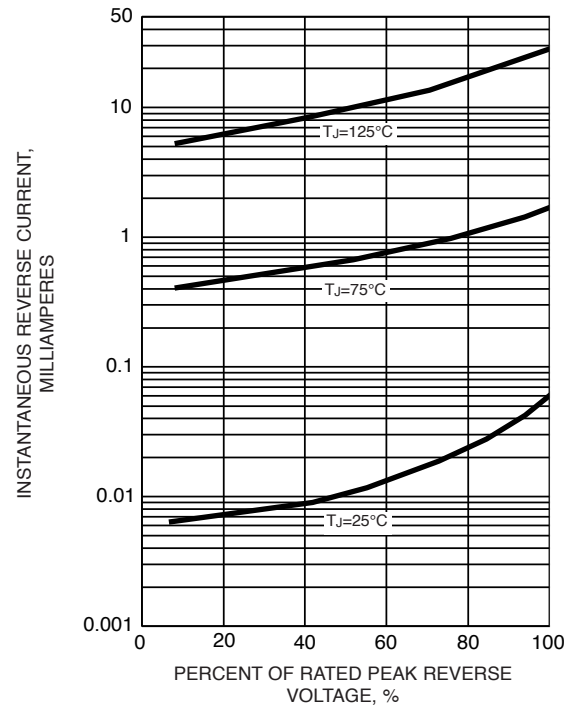


FIG. 5 - TYPICAL JUNCTION CAPACITANCE PER LEG

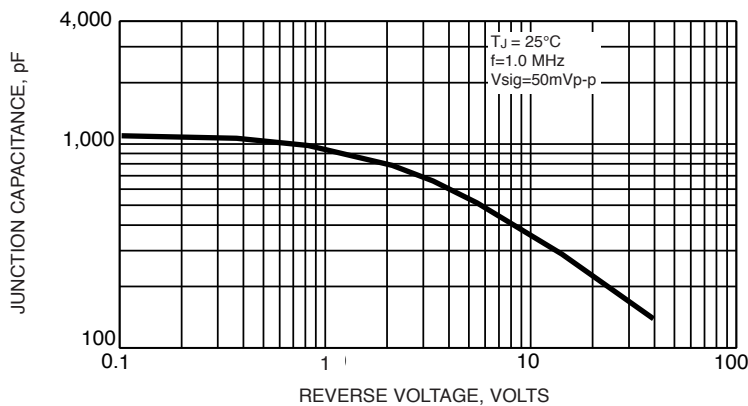


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE PER LEG

