

SCHOTTKY BARRIER RECTIFIERS

VOLTAGE RANGE: 30 --- 100 V
CURRENT: 30 A

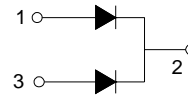
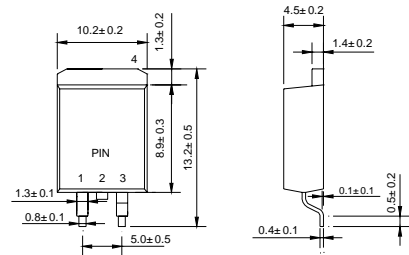
FEATURES

- ◇ Metal-Semiconductor junction with guard ring
- ◇ Epitaxial construction
- ◇ Low forward voltage drop, low switching losses
- ◇ High surge capability
- ◇ For use in low voltage, high frequency inverters free wheeling, and polarity protection applications
- ◇ The plastic material carries U/L recognition 94V-0

MECHANICAL DATA

- ◇ Case: JEDEC D²PAK, molded plastic
- ◇ Terminals: Solderable per MIL-STD-750, Method 2026
- ◇ Polarity: As marked
- ◇ Weight: 0.087 ounces, 2.2 grams
- ◇ Mounting position: Any

D²PAK



Dimensions in millimeters

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate by 20%.

		SBLB 3030CT	SBLB 3035CT	SBLB 3040CT	SBLB 3045CT	SBLB 3050CT	SBLB 3060CT	SBLB 3080CT	SBLB 30100CT	UNITS
Maximum recurrent peak reverse voltage	V _{RRM}	30	35	40	45	50	60	80	100	V
Maximum RMS voltage	V _{RMS}	21	25	28	32	35	42	56	70	V
Maximum DC blocking voltage	V _{DC}	30	35	40	45	50	60	80	100	V
Maximum average forward rectified current T _C =100°C	I _{F(AV)}	30								A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	I _{FSM}	275								A
Maximum instantaneous forward voltage @ 15 A	V _F	0.55			0.75		0.85			V
Maximum reverse current @T _C =25°C at rated DC blocking voltage @T _C =100°C	I _R	1.0 75								mA
Typical thermal resistance (Note1)	R _{θJC}	1.5								°C/W
Operating junction temperature range	T _J	-55--- + 125								°C
Storage temperature range	T _{STG}	-55--- + 150								°C

Note: 1. Thermal resistance junction to case.

FIG.1 – PEAK FORWARD SURGE CURRENT

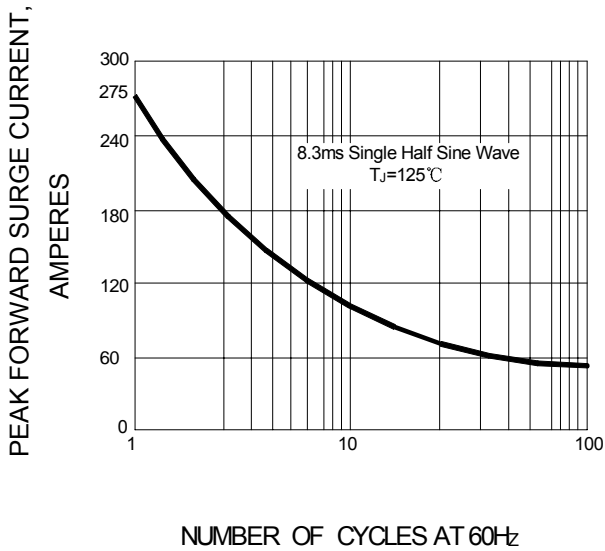


FIG.2 – FORWARD DERATING CURVE

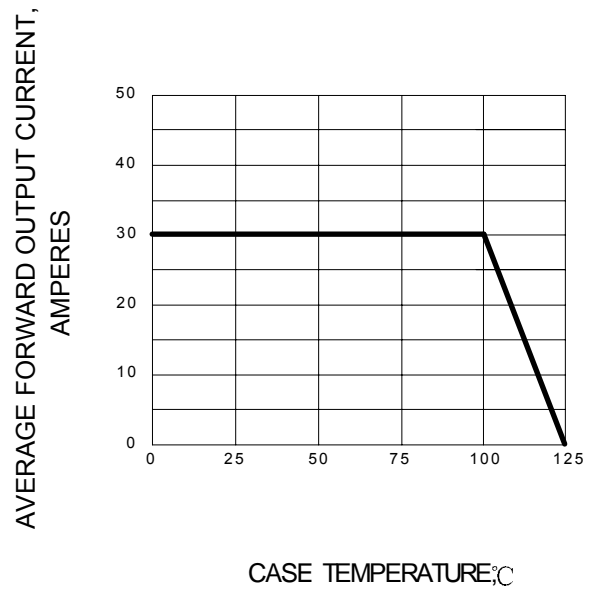


FIG.3 – TYPICAL FORWARD CHARACTERISTIC

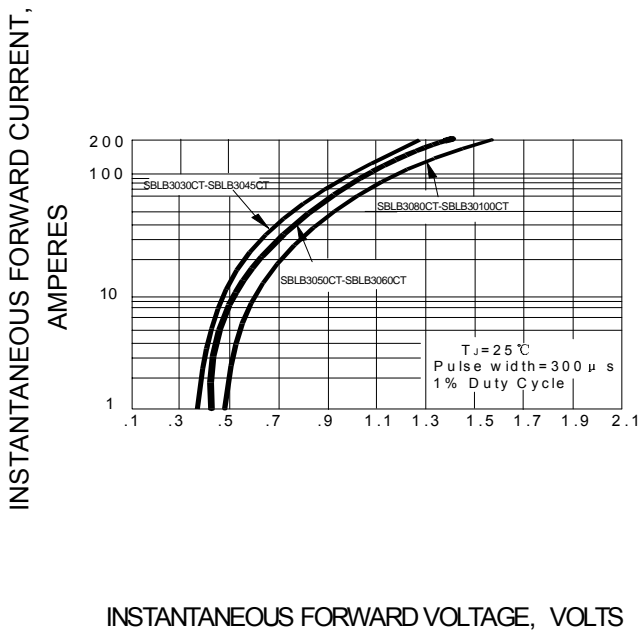


FIG.4 – TYPICAL REVERSE CHARACTERISTIC

