SCHOTTKY BARRIER RECTIFIERS

VOLTAGE RANGE: 30 --- 100 V
CURRENT: 20 A

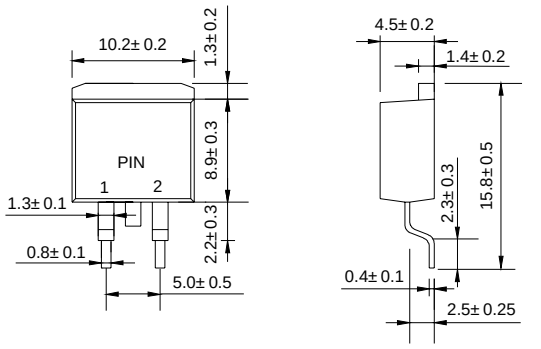
FEATURES

- ◇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 D^2PAK,molded plastic
- ◇Terminals: Leads solderable per MIL- STD-750,Method 2026
- ◇Polarity: As marked
- ◇Weight:0.087 ounces,2.2 gram
- ◇Mounting position: Any

D^2PAK



Dimensions in millimeters

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.

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

		SBLB 2030CT	SBLB 2035CT	SBLB 2040CT	SBLB 2045CT	SBLB 2050CT	SBLB 2060CT	SBLB 2080CT	SBLB 20100CT	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℃	$I_{F(AV)}$	20								A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	I_{FSM}	250								A
Maximum instantaneous forward voltage @ 10 A	V_F	0.55				0.75		0.85		V
Maximum reverse current @T_C=25℃ at rated DC blocking voltage @T_C=100℃	I_R	1.0 50								mA
Typical thermal resistance (Note1)	$R_{\theta JC}$	1.5								℃/W
Operating junction temperature range	T_J	-55--- + 125								℃
Storage temperature range	T_{STG}	-55--- + 150								℃

Note: 1. Thermal resistance junction to case.

FIG.1 -- PEAK FORWARD SURGE CURRENT

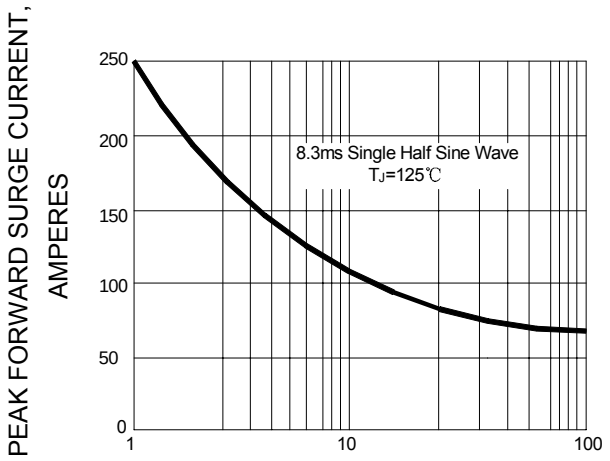


FIG.2 -- FORWARD DERATING CURVE

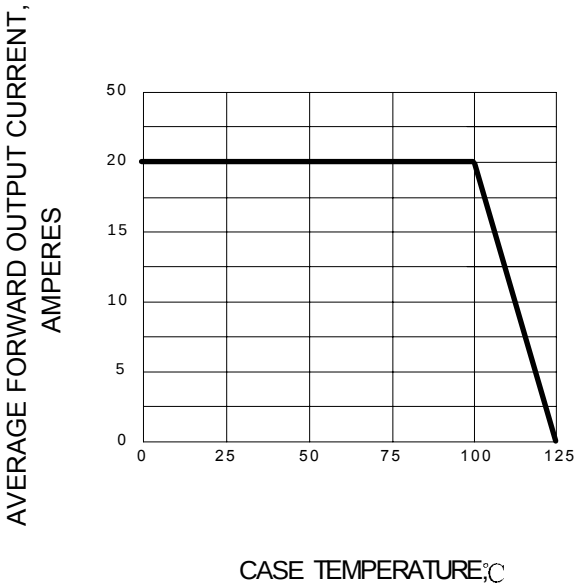


FIG.3 -- TYPICAL FORWARD CHARACTERISTIC

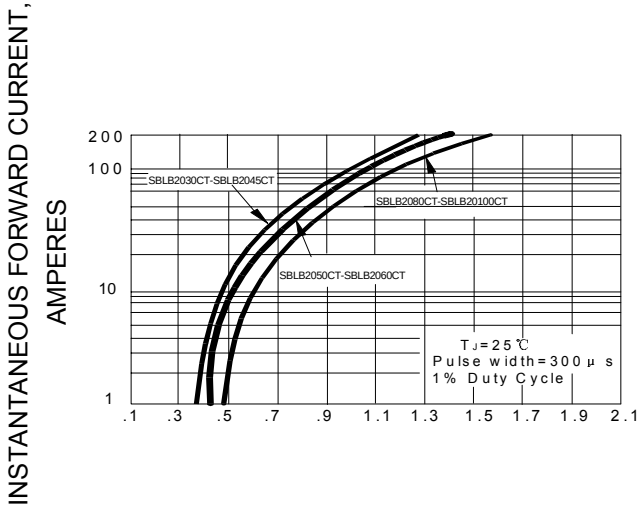


FIG.4 -- TYPICAL REVERSE CHARACTERISTIC