LITE-ON SEMICONDUCTOR

SBL20V60CT

SCHOTTKY BARRIER RECTIFIERS

REVERSE VOLTAGE **- 60** Volts
FORWARD CURRENT **- 20** Amperes

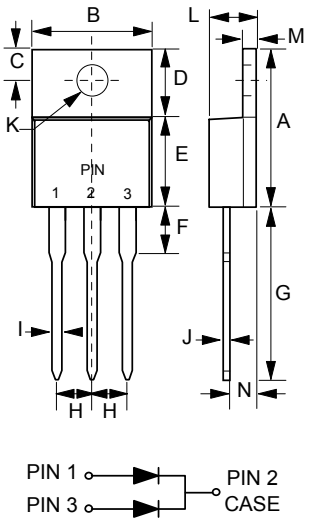
FEATURES

- Metal of silicon rectifier,majority carrier conducton
- Guard ring for transient protection
- Low power loss, high efficiency
- High current capability, low VF
- High surge capacity
- Plastic package has UL flammability classification 94V-0
- For use in low voltage,high frequency inverters,free whelling,and polarity protection applications

MECHANICAL DATA

- Case : TO-220AB molded plastic
- Polarity : As marked on the body
- Weight : 0.08 ounces, 2.24 grams
- Mounting position : Any
- Max. mounting torque = 0.5 N.m (5.1 Kgf.cm)

TO-220AB



TO-220AB		
DIM.	MIN.	MAX.
A	14.22	15.88
B	9.65	10.67
C	2.54	3.43
D	5.84	6.86
E	8.26	9.28
F	-	6.35
G	12.70	14.73
H	2.29	2.79
I	0.51	1.14
J	0.30	0.64
K	3.53 ∅	4.09 ∅
L	3.56	4.83
M	1.14	1.40
N	2.03	2.92
All Dimensions in millimeter		

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.

CHARACTERISTICS		SYMBOL	SBL20V60CT	UNIT
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	60	V
Maximum RMS Voltage		V_{RMS}	42	V
Maximum DC Blocking Voltage		V_{DC}	60	V
Maximum Average Forward Rectified Current (See Fig.1)	@T_C=125℃	$I_{(AV)}$	20	A
Peak Forward Surge Current 8.3ms single half sine-wave	@T_J=25℃	I_{FSM}	200	A
Maximum Forward Voltage at 10A DC (Note 1)	@T_J=25℃ @T_J=125℃	V_F	0.60 0.55	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	@T_J=25℃ @T_J=100℃	I_R	0.1 20	mA
Typical Junction Capacitance per element (Note 2)		C_J	430	pF
Typical Thermal Resistance (Note 3)		$R_{\theta JC}$	2.0	°C/W
Operating Temperature Range		T_J	-55 to +150	℃
Storage Temperature Range		T_{STG}	-55 to +150	℃

NOTES : 1. 300us Pulse Width, 2% Duty Cycle.
2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
3.Device mounted on 75mm x 75mm x 1.6mm Cu plate.

REV. 3, Oct-2010, KTHC54

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RATING AND CHARACTERISTIC CURVES
SBL20V60CT

FIG.1 - FORWARD CURRENT DERATING CURVE

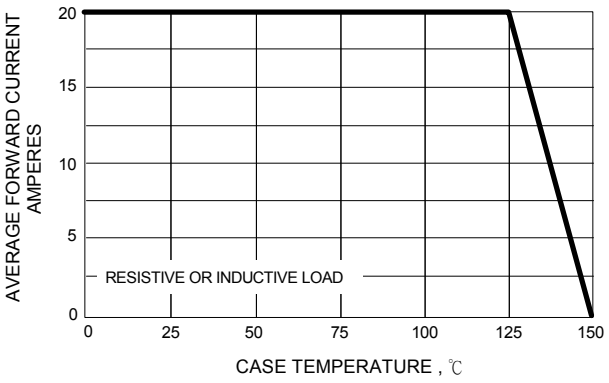


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

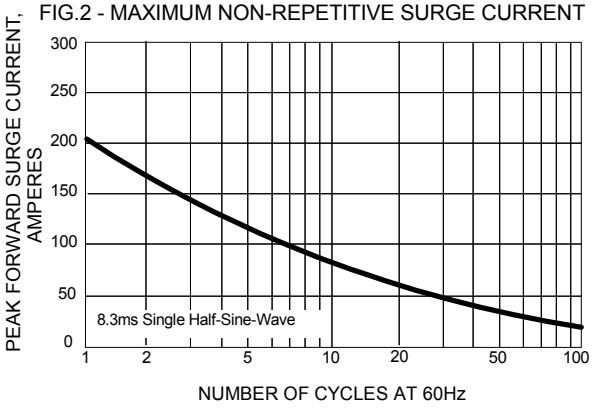


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

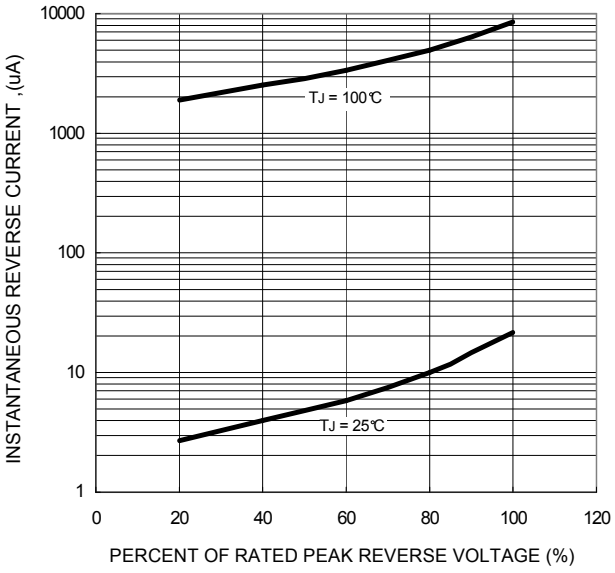


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

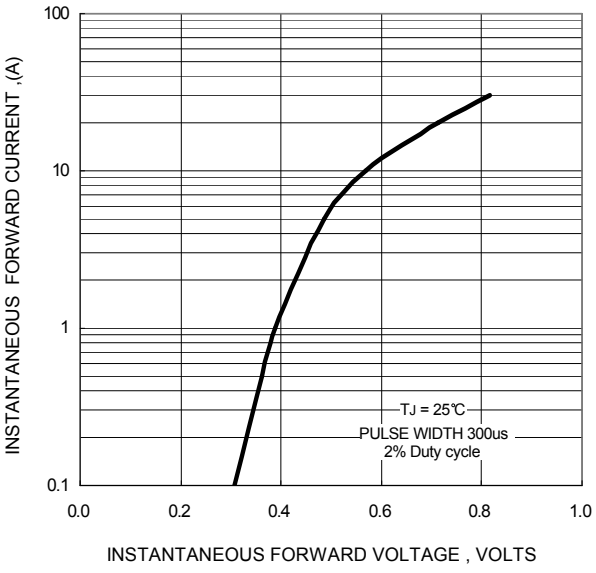
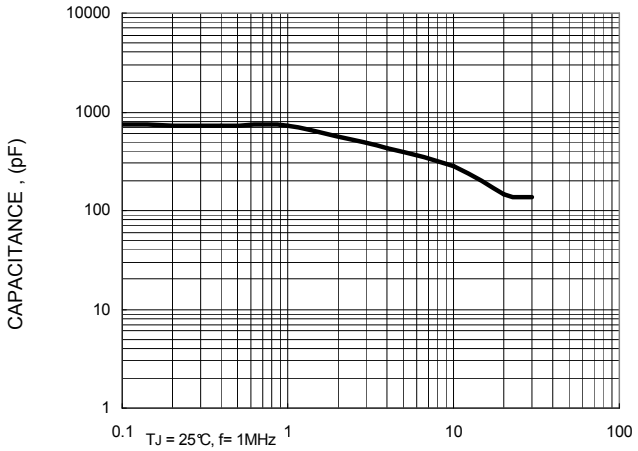


FIG.5 - TYPICAL JUNCTION CAPACITANCE



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