WINSOURCE ELECTRONICS

THE DATASHEET OF

SBL20V60CT

SBL20V60CT

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SCHOTTKY BARRIER RECTIFIERS

REVERSE VOLTAGE – 60 Volts
FORWARD CURRENT – 20 Amperes

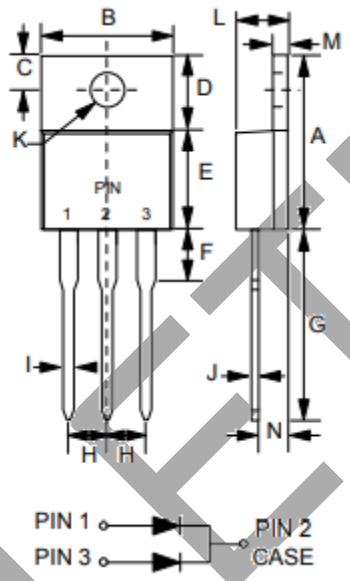
FEATURES

- Metal of silicon rectifier, majority carrier conduction
- 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 wheeling, and polarity protection applications
- **Lead-Free Finish; RoHS Compliant (Notes 1 & 2)**

MECHANICAL DATA

- Package: 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 Ø	4.09 Ø
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°C 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)	@TC=125°C	$I_{(AV)}$	20	A
Peak Forward Surge Current 8.3ms single half sine-wave	@Tj=25°C	I_{FSM}	200	A
Maximum Forward Voltage at 10A DC (Note 3)	@Tj=25°C @Tj=125°C	V_F	0.60 0.55	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	@Tj=25°C @Tj=100°C	I_R	0.1 20	mA
Typical Junction Capacitance per element (Note 4)		C_J	430	pF
Typical Thermal Resistance (Note 5)		$R_{\Theta JC}$	2.0	°C/W
Operating Temperature Range		T_J	-55 to +150	°C
Storage Temperature Range		T_{STG}	-55 to +150	°C

Notes:
1. EU Directive 2002/95/EC (RoHS), 2011/65/EU (RoHS 2) & 2015/863/EU (RoHS 3) compliant. All applicable RoHS exemptions applied.
2. See https://www.diodes.com/quality/lead-free/ for more information about Diodes Incorporated's definitions of Halogen- and Antimony-free, "Green" and Lead-free.
3. 300us Pulse Width, 2% Duty Cycle.
4. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
5. Device mounted on 75mm x 75mm x 1.6mm Cu plate.

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RATING AND CHARACTERISTIC CURVES
SBL20V60CT

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FIG.1 - FORWARD CURRENT DERATING CURVE

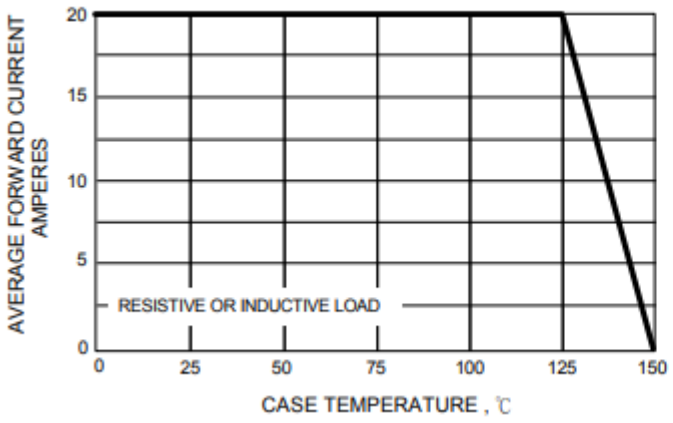


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

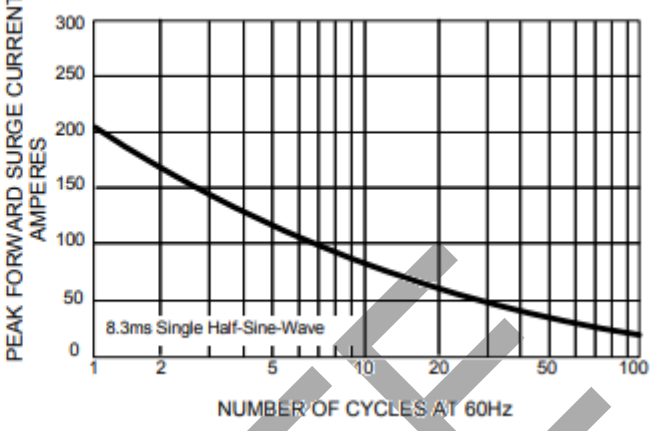


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

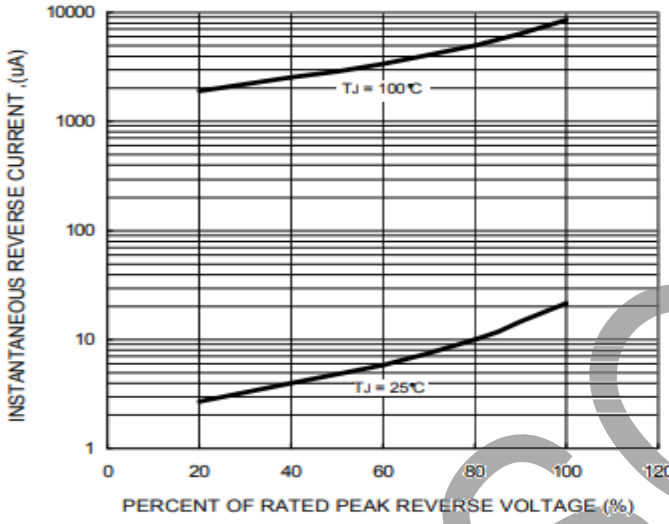


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

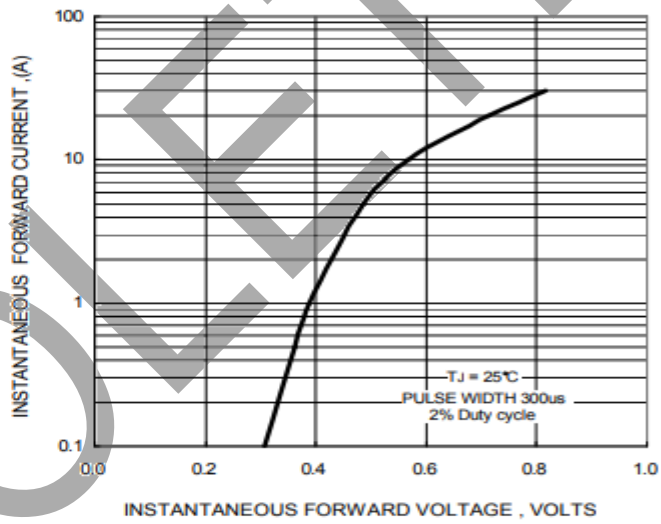
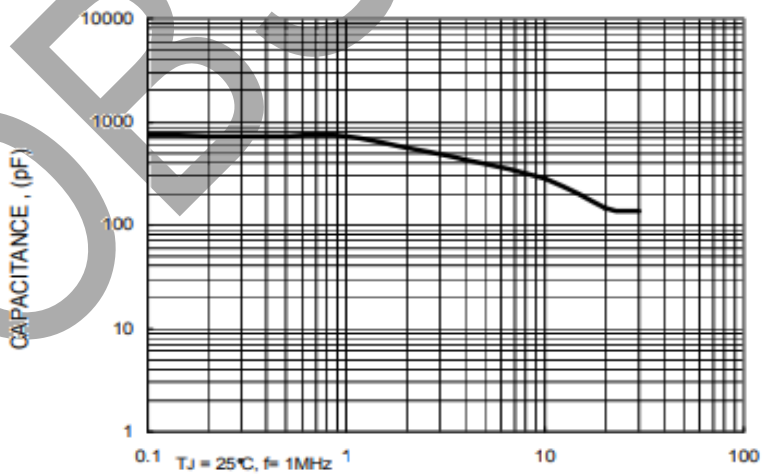


FIG.5 - TYPICAL JUNCTION CAPACITANCE



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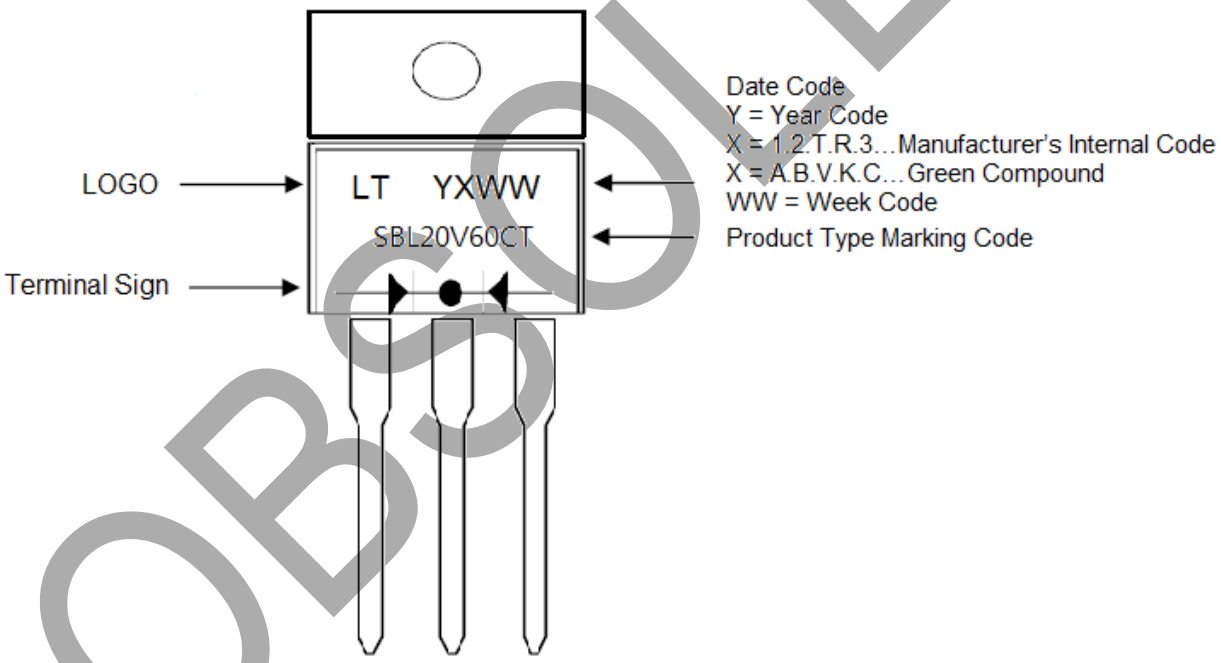
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Ordering Information:

Part Number	Package	Packing	
		Qty.	Carrier
SBL20V60CT	TO-220AB	50pcs	Tube

Marking Information:



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