

SBL2060CT(LS)

SCHOTTKY BARRIER RECTIFIER

REVERSE VOLTAGE - 60 Volts
FORWARD CURRENT - 20 Amperes

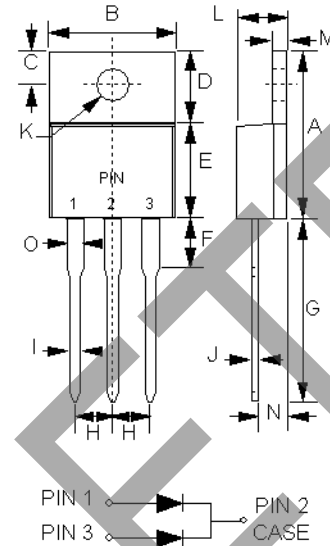
FEATURES

- Metal of silicon rectifier, majority carrier conduction
- Guard ring for transient protection
- Low power loss, high efficiency
- High current capability, low VF
- High surge capability
- Plastic package has UL flammability classification 94V-0
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- IEC 61000-4-2, level 4 (ESD). > 15KV (air)
- **Lead-Free Finish; RoHS Compliant (Notes 1 & 2)**

MECHANICAL DATA

- Package: JEDEC TO-220AB
- Polarity indicator: As marked on the body
- Weight: 0.08 ounces, 2.24 grams
- Terminals: Lead Free Plating
- 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 \varnothing	4.09 \varnothing
L	3.56	4.83
M	1.14	1.40
N	2.03	2.92
O	1.14	1.50

All Dimensions in millimeter

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

PARAMETER	SYMBOL	SBL2060CT	UNIT		
Device marking code	Note	SBL2060CT	---		
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	60	V		
Maximum RMS Voltage	V_{RMS}	42	V		
Maximum DC Blocking Voltage	V_{DC}	60	V		
Average Rectified Output Current	@TC=100°C I_F	20	A		
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	225	A		
Typical Junction Capacitance per element (3)	C_J	600	pF		
Storage temperature range	T_{STG}	-55 to +150	°C		
Operating junction temperature range	T_J	-55 to +150	°C		
PARAMETER	TEST CONDITIONS	SYMBOL	Min.	Max.	UNIT
Forward Voltage (4)	$I_F=10A$ $T_j=25^\circ C$	V_F	---	0.75	V
Leakage Current (4)	$V_R=Rated$ $T_j=25^\circ C$ $T_j=100^\circ C$	I_R	---	0.1 50	mA
THERMAL CHARACTERISTIC	SYMBOL	Typical	UNIT		
Typical thermal resistance _ Junction to Case (5)	$R_{\theta JC}$	2.0	°C/W		

Note:

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. Measured at 1.0MHz and applied reverse voltage of 4.0 V_{DC} .
4. 300us Pulse Width, 2% Duty Cycle.
5. Thermal Resistance Junction to Case. Device mounted on L42xH25xW25mm_ black Aluminum finny heat sink.

RATING AND CHARACTERISTIC CURVES

SBL2060CT

OBSOLETE - PART DISCONTINUED

FIG.1- FORWARD CURRENT DERRATING CURVE

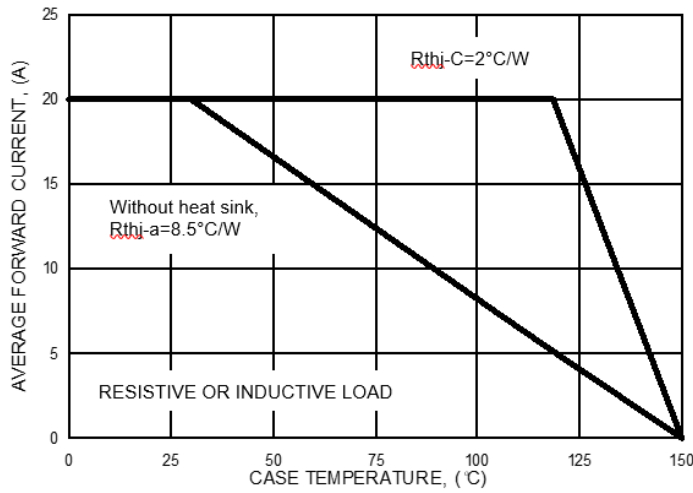


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

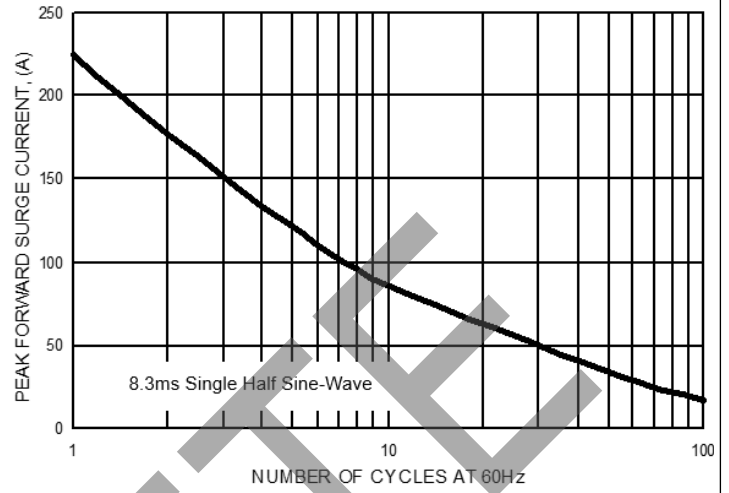


FIG.3- TYPICAL REVERSE CHARACTERISTICS

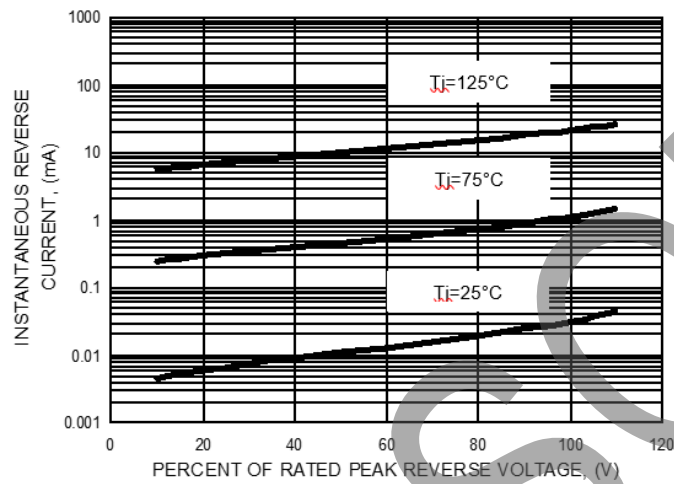


FIG.4- TYPICAL FORWARD CHARACTERISTICS

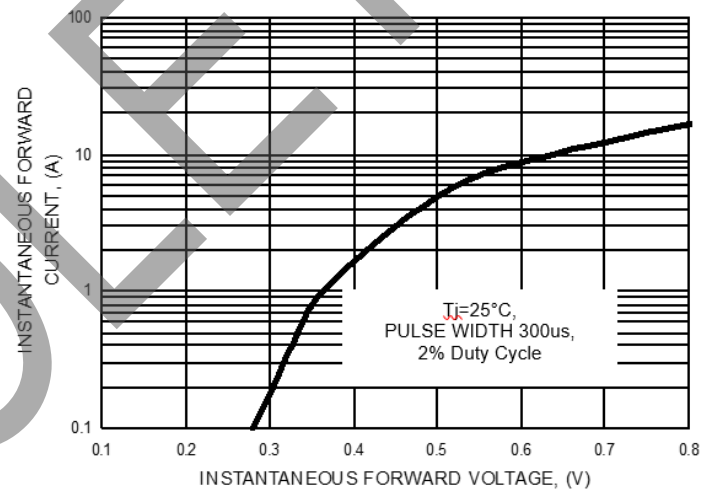


FIG.5- TYPICAL JUNCTION CAPACITANCE

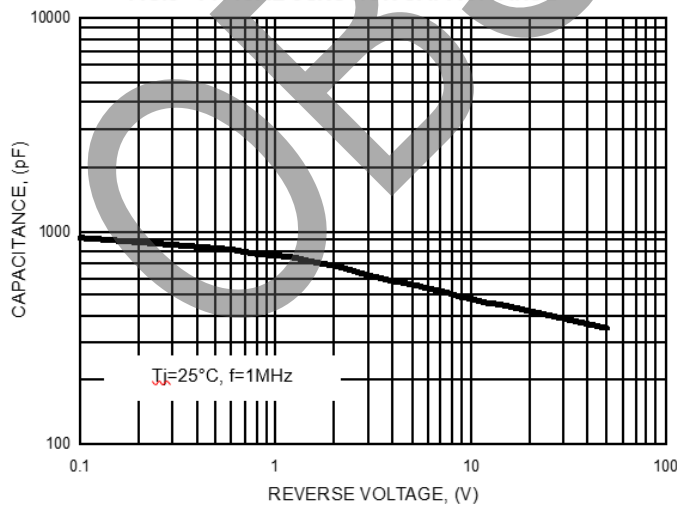
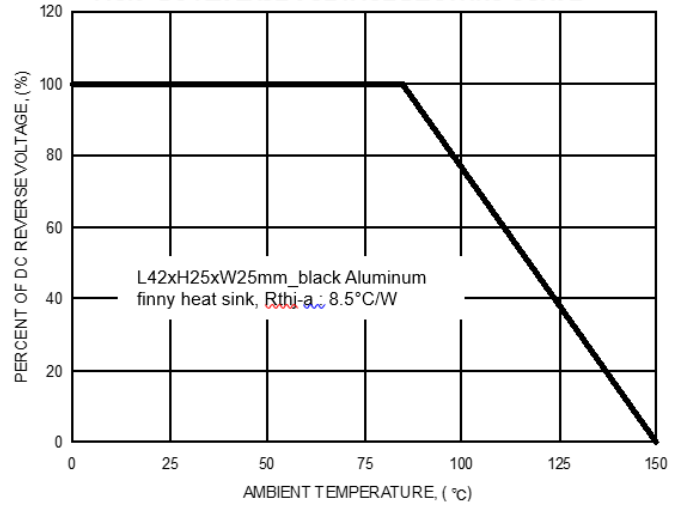


FIG.6- DC REVERSE VOLTAGE DERRATING CURVE

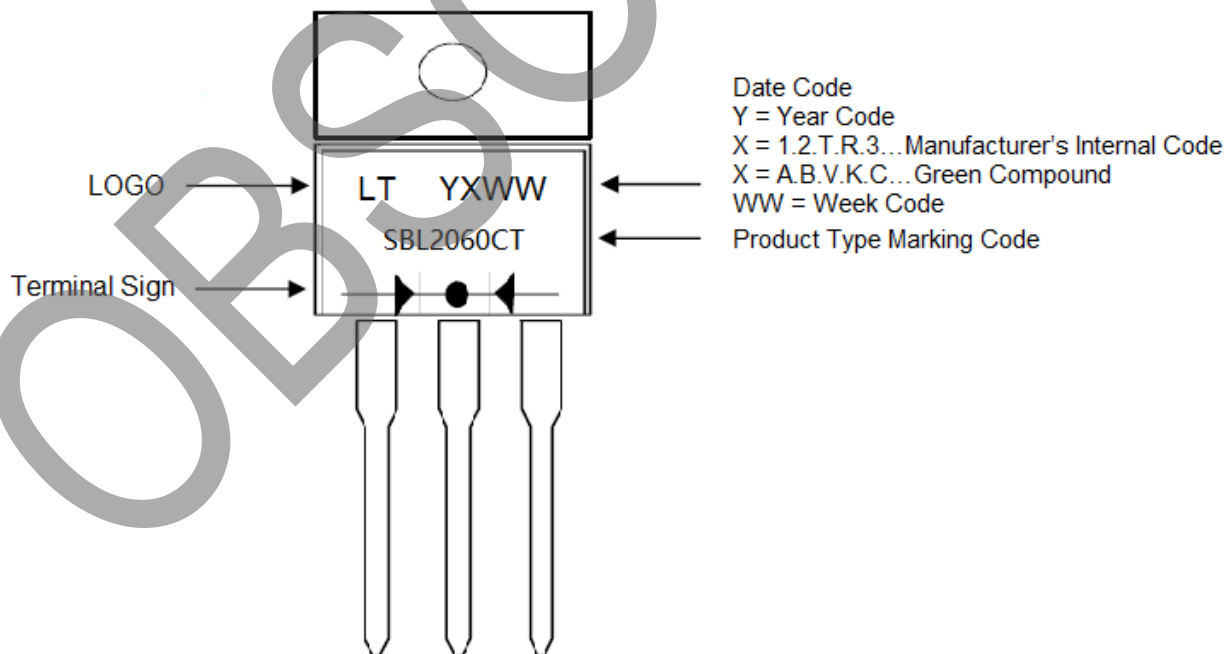


OBSOLETE - PART DISCONTINUED

Ordering Information :

Part Number	Package	Packing	
		Qty.	Carrier
SBL2060CT-LS	TO-220AB	50pcs	Tube

Marking Information :



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