

SCHOTTKY BARRIER RECTIFIERS

REVERSE VOLTAGE - 60 Volts
FORWARD CURRENT - 20 Amperes

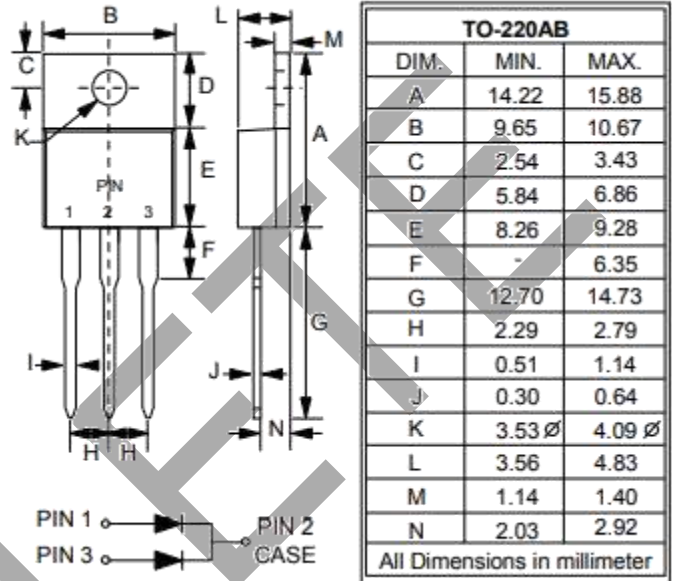
FEATURES

- 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



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 @T _J =25°C	I _{FSM}	200	A
Maximum Forward Voltage at 10A DC (Note 3) @T _J =25°C @T _J =125°C	V _F	0.60 0.55	V
Maximum DC Reverse Current at Rated DC Blocking Voltage @T _J =25°C @T _J =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 _{θJC}	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.

RATING AND CHARACTERISTIC CURVES
SBL20V60CT

OBSOLETE - PART DISCONTINUED

FIG.1 - FORWARD CURRENT DERATING CURVE

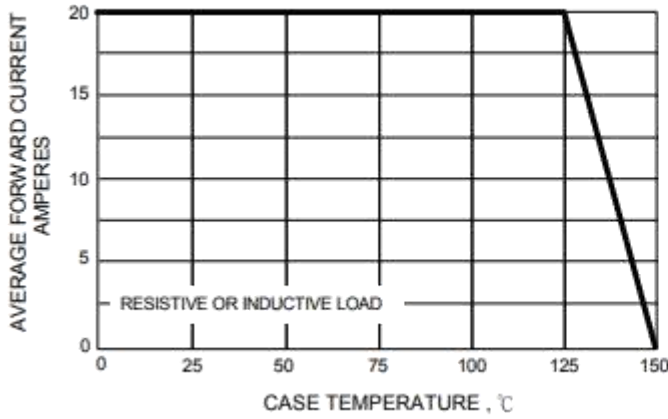


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

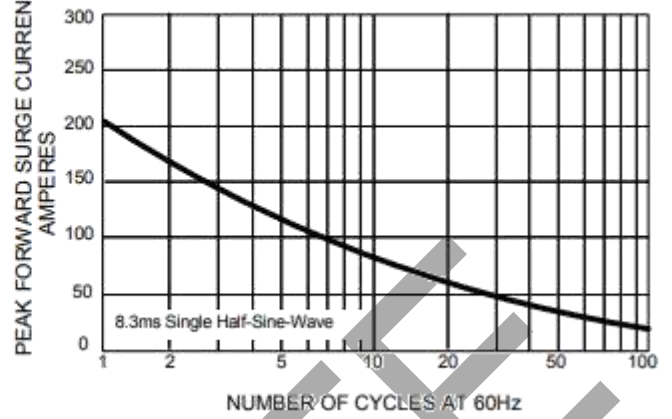


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

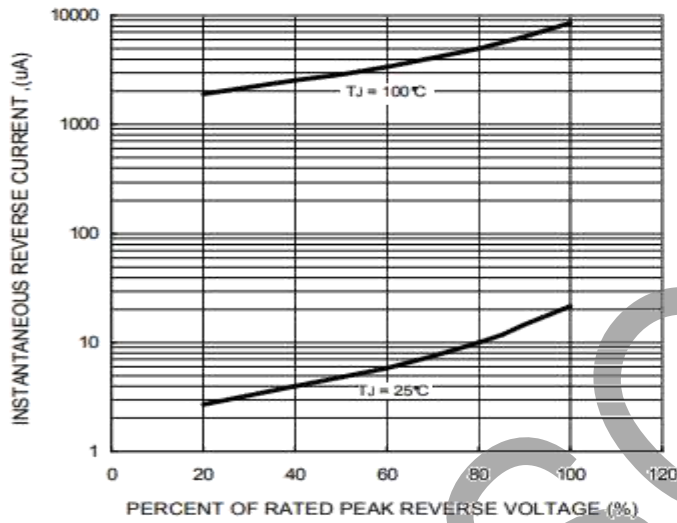


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

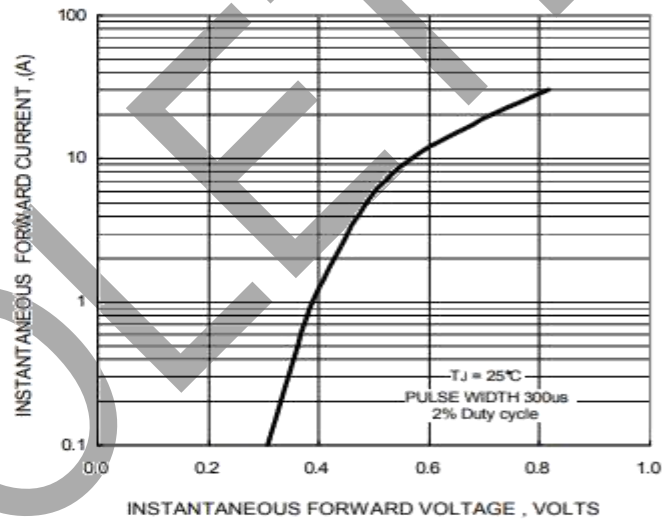
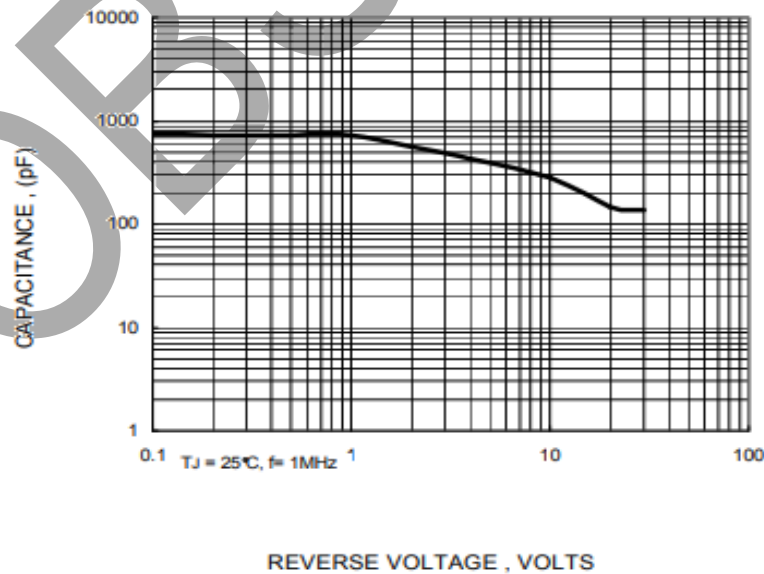


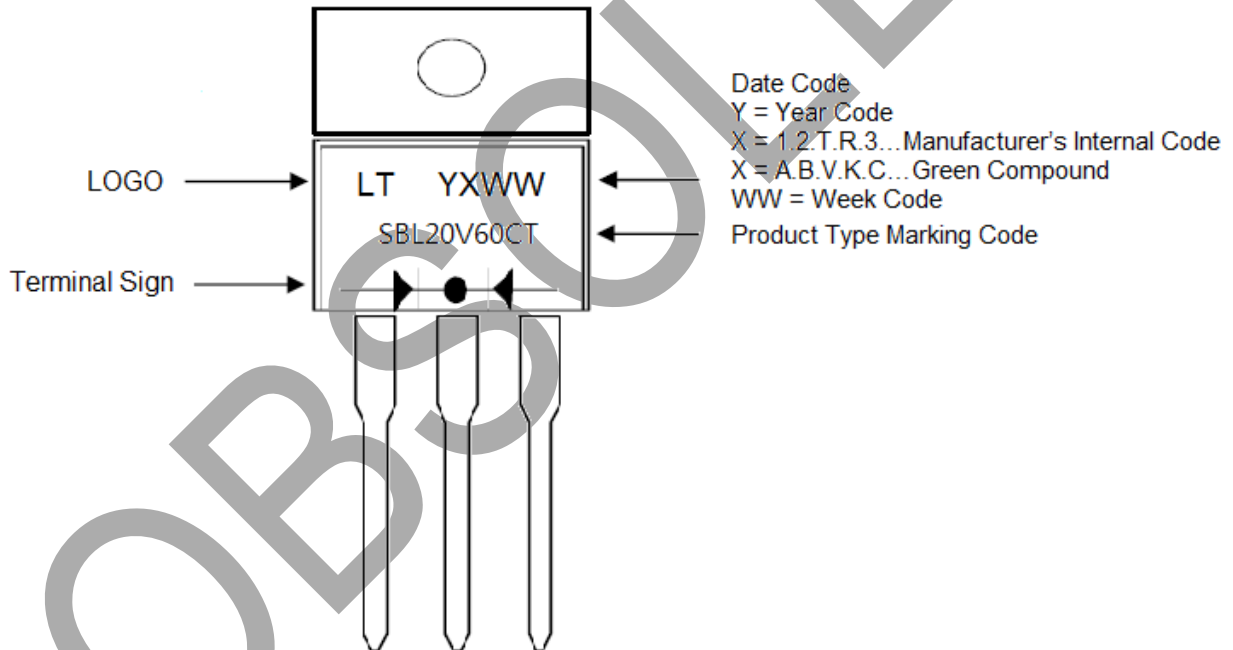
FIG.5 - TYPICAL JUNCTION CAPACITANCE



Ordering Information:

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

Marking Information:



OBSOLETE - PART DISCONTINUED

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