

# **SBL2030CT - SBL2060CT**

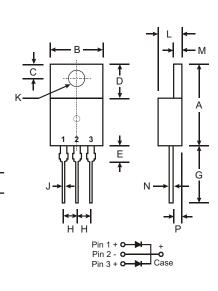
## **20A SCHOTTKY BARRIER RECTIFIER**

#### **Features**

- Schottky Barrier Chip
- Guard Ring Die Construction for Transient Protection
- Low Power Loss, High Efficiency
- High Surge Capability
- High Current Capability and Low Forward Voltage Drop
- For Use in Low Voltage, High Frequency Inverters, Free Wheeling, and Polarity Protection Applications
- Plastic Material: UL Flammability Classification Rating 94V-0

#### **Mechanical Data**

- Case: Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Body
- Weight: 2.24 grams (approx.)
- Mounting Position: Any
- Marking: Type Number



TO-220AB						
Dim	Min	Max				
Α	14.22	15.88				
В	9.65	10.67				
С	2.54	3.43				
D	5.84	6.86				
E		6.35				
G	12.70	14.73				
Н	2.29	2.79				
J	0.51	1.14				
к	3.53Ø	4.09Ø				
L	3.56	4.83				
М	1.14	1.40				
N	0.30	0.64				
Р	2.03	2.92				
All Dimensions in mm						

### Maximum Ratings and Electrical Characteristics @ T<sub>A</sub> = 25°C unless otherwise specified

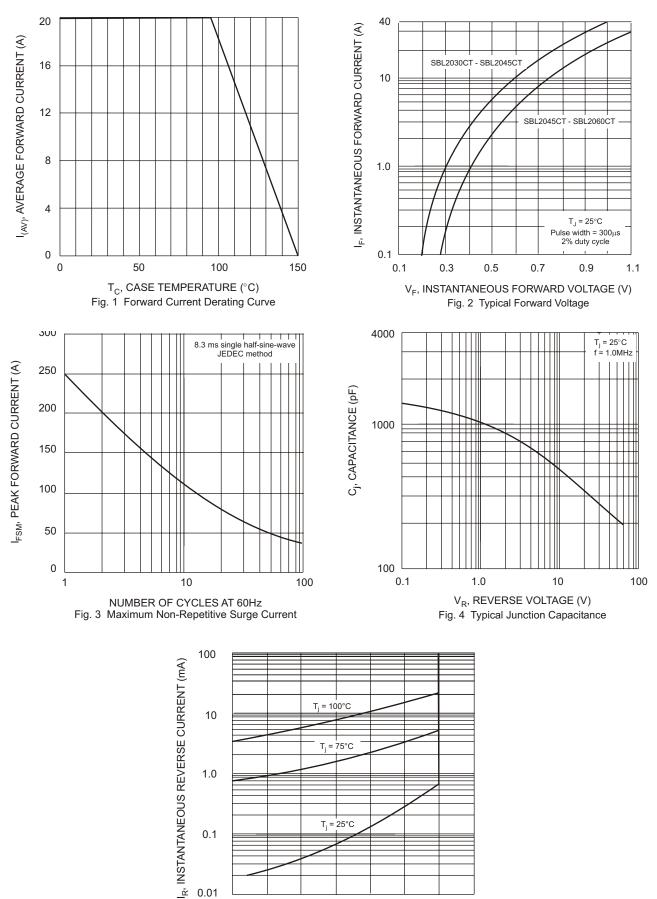
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	SBL 2030CT	SBL 2035CT	SBL 2040CT	SBL 2045CT	SBL 2050CT	SBL 2060CT	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	30	35	40	45	50	60	v
RMS Reverse Voltage	V <sub>R(RMS)</sub>	21	24.5	28	31.5	35	42	V
Average Rectified Output Current (Note 1) $@ T_C = 95^{\circ}C$		20						А
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)		250						A
Forward Voltage Drop @ $I_F = 10A$ , $T_C = 25^{\circ}C$	V <sub>FM</sub>	0.55 0.75		75	V			
Peak Reverse Current $@T_C = 25^{\circ}C$ at Rated DC Blocking Voltage $@T_C = 100^{\circ}C$		1.0 50						mA
Typical Junction Capacitance (Note 2)		650						pF
Typical Thermal Resistance Junction to Case (Note 1)		2.8						°C/W
Operating and Storage Temperature Range		-65 to +150					°C	

Notes: 1. Thermal resistance junction to case mounted on heatsink.

2. Measured at 1.0 MHz and Applied Reverse Voltage of 4.0V DC.





80

PERCENT OF RATED PEAK REVERSE VOLTAGE (%) Fig. 5 Typical Reverse Characteristics

120

40

0.01

0