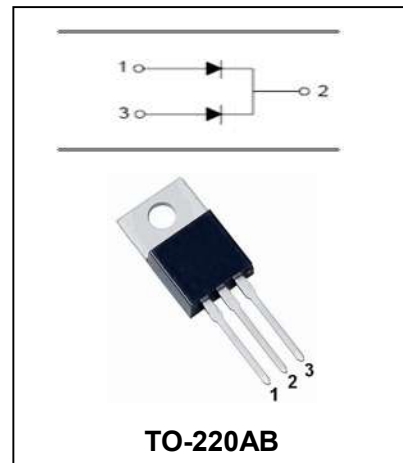


Schottky Barrier Rectifier

SBL3030CT-SBL30100CT

FEATURES

- Metal-Semiconductor Junction With Guard Ring.
- Epitaxial Construction.
- Low Forward Voltage Drop,Low Switching Losses.
- High Surge Capacity.
- For Use In Low Voltage,High Frequency Inverters Free Wheeling,and Polarity Protection Applications.
- The Plastic Material Carries U/L Recognition 94V-0.



Ordering Information

Part Number	Package	Shipping	Marking Code
SBL3030CT□	TO-220AB	50/Tube	SBL3030CT
SBL3035CT□	TO-220AB	50/Tube	SBL3035CT
SBL3040CT□	TO-220AB	50/Tube	SBL3040CT
SBL3045CT□	TO-220AB	50/Tube	SBL3045CT
SBL3050CT□	TO-220AB	50/Tube	SBL3050CT
SBL3060CT□	TO-220AB	50/Tube	SBL3060CT
SBL3080CT□	TO-220AB	50/Tube	SBL3080CT
SBL30100CT□	TO-220AB	50/Tube	SBL30100CT

□: none is for Lead Free package;

“G” is for Halogen Free package.

Schottky Barrier Rectifier

SBL3030CT-SBL30100CT

MAXIMUM RATING operating temperature range applies unless otherwise specified

Sym bol	Parameter	SBL 3030 CT	SBL 3035 CT	SBL 3040 CT	SBL 3045 CT	SBL 3050 CT	SBL 3060 CT	SBL 3080 CT	SBL 30100 CT	Unit
V_{RRM}	Recurrent Peak Reverse Voltage	30	35	40	45	50	60	80	100	V
V_{RMS}	RMS Voltage	21	25	28	32	35	42	56	70	V
V_{DC}	DC Blocking Voltage	30	35	40	45	50	60	80	100	V
$I_{F(AV)}$	Average Forward Rectified Current Per $T_A=100^\circ\text{C}$	30								A
I_{FSM}	Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimosed on Rated Load	200								A
$R_{\theta JC}$	Thermal Resistance(Note1)	2								$^\circ\text{C/W}$
T_j	Operating Junction Temperature Range	-55 to +150								$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55 to +150								$^\circ\text{C}$

Note:1.Thermal resistance junction to case.

ELECTRICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified.

Parameter	Symbol	Test conditions	SBL3030CT-SBL3045CT	SBL3050CT-SBL3060CT	SBL3080CT-SBL30100CT	UNIT
			MAX			
Forward Voltage (NOTE1)	V_F	$I_F=15\text{A}, T_A=25^\circ\text{C}$	0.55	0.75	0.85	V
		$I_F=15\text{A}, T_A=125^\circ\text{C}$	0.5	0.7	0.65	
Reverse Current (NOTE2)	I_R	$V_R=V_{RRM}, T_A=25^\circ\text{C}$ $V_R=V_{RRM}, T_A=125^\circ\text{C}$	0.1 50			mA

NOTE1: Pulse test 300us,pulse width 1% duty cycle.

NOTE2: Pulse test 5ms,pulse width 1% duty cycle.

Schottky Barrier Rectifier

SBL3030CT-SBL30100CT

TYPICAL CHARACTERISTICS @ $T_a=25^{\circ}\text{C}$ unless otherwise specified

FIG.1 – PEAK FORWARD SURGE CURRENT

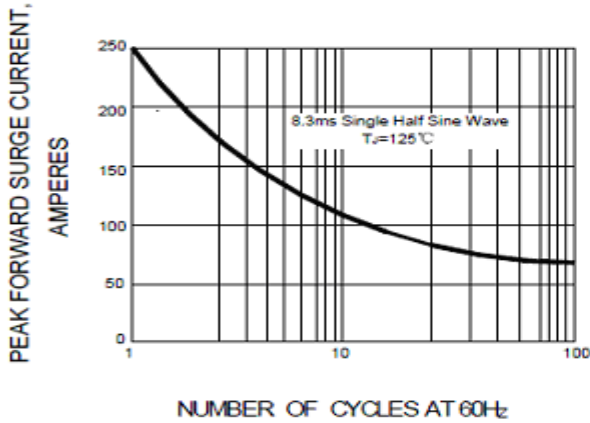


FIG.2 – FORWARD DERATING CURVE

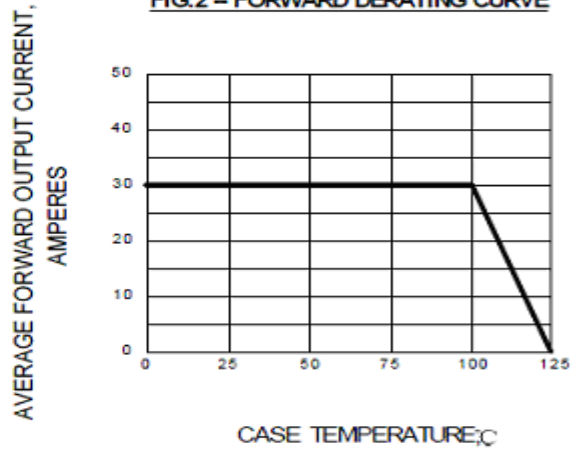


FIG.3 – TYPICAL FORWARD CHARACTERISTIC

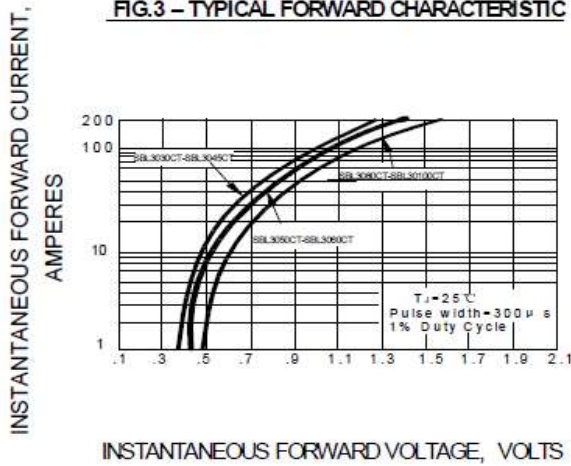
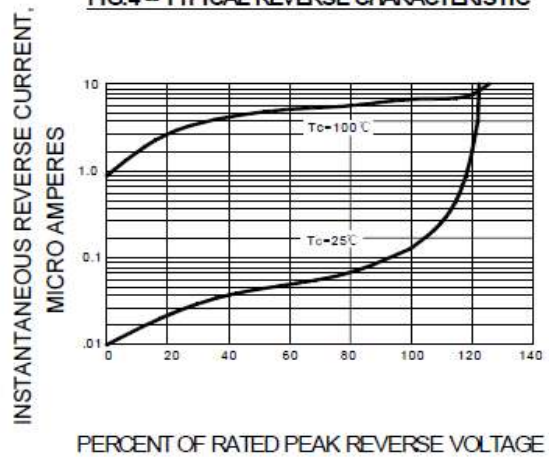


FIG.4 – TYPICAL REVERSE CHARACTERISTIC



Schottky Barrier Rectifier

SBL3030CT-SBL30100CT

PACKAGE OUTLINE

Plastic surface mounted package

TO-220AB

