



# SBT60100CT

## SCHOTTKY BARRIER RECTIFIER

**Voltage** 100 V **Current** 60 A

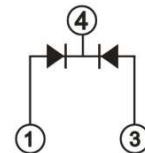
### Features

- Deal for automated placement
- Low power loss, high efficiency
- High surge current capability
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

### Mechanical Data

- Case: TO-220AB Package
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.067 ounces, 1.89 grams

TO-220AB



## Maximum Ratings and Thermal Characteristics (T<sub>A</sub> = 25 °C unless otherwise noted)

PARAMETER		SYMBOL	LIMIT	UNITS
Maximum Repetitive Peak Reverse Voltage		V <sub>RRM</sub>	100	V
Maximum Rms Voltage		V <sub>RMS</sub>	70	V
Maximum Dc Blocking Voltage		V <sub>DC</sub>	100	V
Maximum Average Forward Current	per device	I <sub>F(AV)</sub>	60	A
	per diode		30	
Peak Forward Surge Current: 8.3 ms Single Half Sine-Wave Superimposed On Rated Load		I <sub>FSM</sub>	320	A
Typical Thermal Resistance		R <sub>θJC</sub> <sup>(1)</sup>	2	°C/W
Operating Junction Temperature Range		T <sub>J</sub>	-55~150	°C
Storage Temperature Range		T <sub>STG</sub>	-55~150	°C



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### Electrical Characteristics ( $T_A = 25^\circ\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Forward Voltage	$V_F$	$I_F = 5\text{ A}, T_J = 25^\circ\text{C}$	-	0.49	-	V
		$I_F = 10\text{ A}, T_J = 25^\circ\text{C}$	-	0.56	-	
		$I_F = 15\text{ A}, T_J = 25^\circ\text{C}$	-	-	0.71	
		$I_F = 30\text{ A}, T_J = 25^\circ\text{C}$	-	-	0.86	
		$I_F = 5\text{ A}, T_J = 125^\circ\text{C}$	-	0.43	-	
		$I_F = 10\text{ A}, T_J = 125^\circ\text{C}$	-	0.53	-	
		$I_F = 30\text{ A}, T_J = 125^\circ\text{C}$	-	0.71	-	
Reverse Current	$I_R^{(2)}$	$V_R = 70\text{ V}, T_J = 25^\circ\text{C}$	-	5	-	uA
		$V_R = 100\text{ V}, T_J = 25^\circ\text{C}$	-	-	50	
		$V_R = 100\text{ V}, T_J = 125^\circ\text{C}$	-	7	-	mA

NOTES:

1. Mounted on infinite heatsink.
2. Short duration pulse test used to minimize self-heating effect.



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## TYPICAL CHARACTERISTIC CURVES

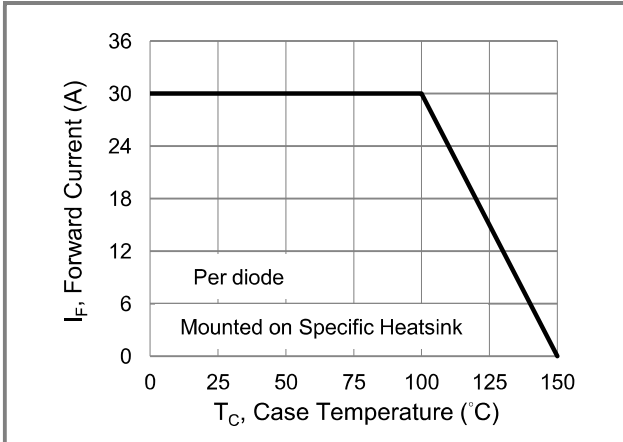


Fig.1 Forward Current Derating Curve

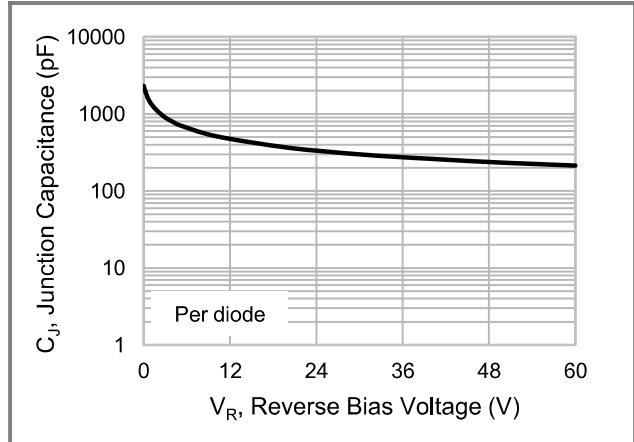


Fig.2 Typical Junction Capacitance

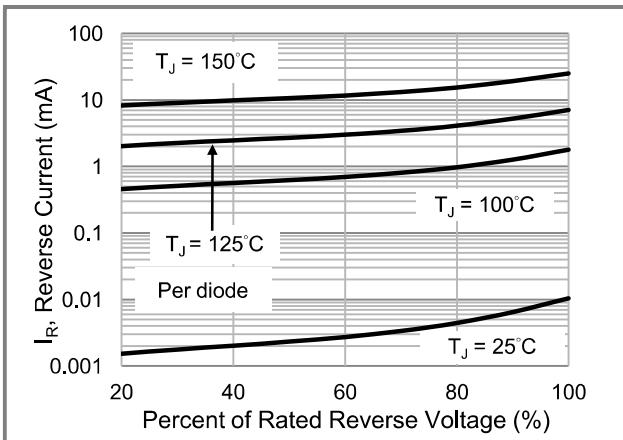


Fig.3 Typical Reverse Characteristics

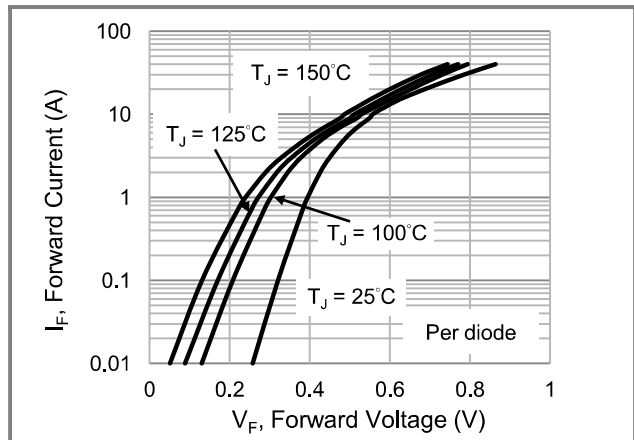


Fig.4 Typical Forward Characteristics

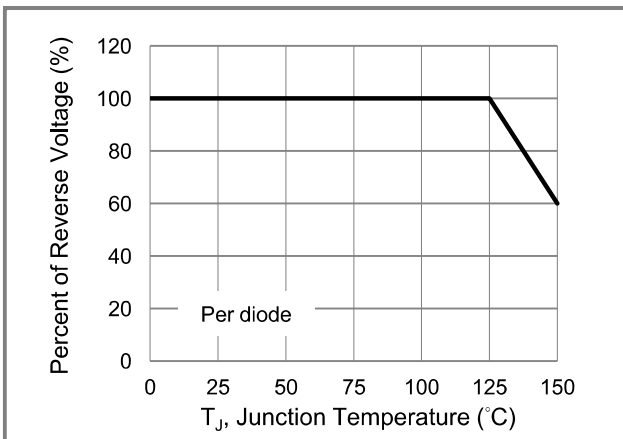


Fig.5 Operating Temperature Derating Curve

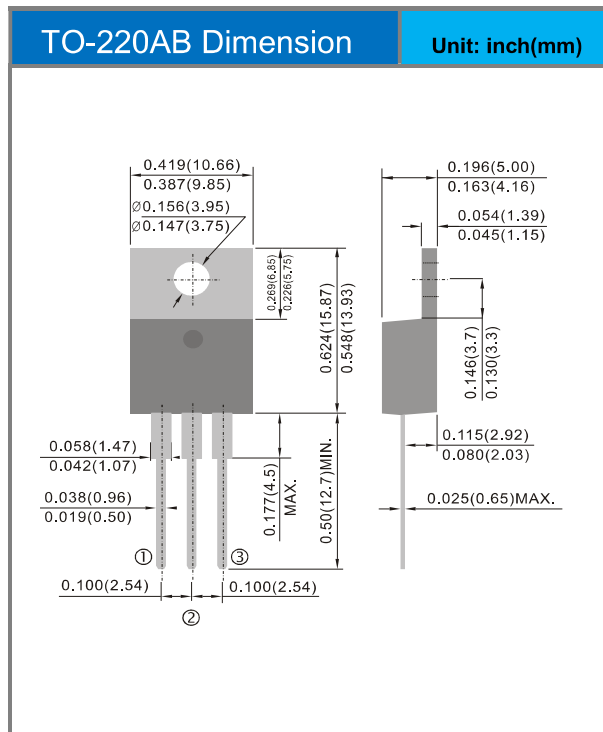


# SBT60100CT

## Part No Packing Code Version

Part No Packing Code	Package Type	Packing Type	Marking	Version
SBT60100CT_T0_00001	TO-220AB	50pcs / Tube	SBT60100CT	Halogen free

## Packaging Information & Mounting Pad Layout





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