

10A SBR[®]
Super Barrier Rectifier

NEW PRODUCT

Features

- Low Forward Voltage Drop
- Excellent High Temperature Stability
- Super Barrier Design
- Soft, Fast Switching Capability
- Molded Plastic TO-220AB, and ITO-220AB packages
- **Lead Free Finish, RoHS Compliant (Note 2)**

Mechanical Data

- Case Material: Molded Plastic, UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020C
- Terminals: Matte Tin Finish annealed over Copper leadframe. Solderable per MIL-STD-202, Method 208 **(e3)**
- Marking: See Page 3
- Ordering Information: See Page 3

Maximum Ratings @ $T_A = 25^\circ\text{C}$ unless otherwise specified

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

Characteristic	Symbol	Value	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_{RM}	60	V
RMS Reverse Voltage	$V_{R(RMS)}$	42	V
Average Rectified Output Current @ $T_C = 25^\circ\text{C}$	I_O	10	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I_{FSM}	120	A
Peak Repetitive Reverse Surge Current (2 μ S-1Khz)	I_{RRM}	2	A
Maximum Thermal Resistance (per leg) Package = TO-220AB Package = ITO-220AB	$R_{\theta JC}$	2 4	$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +150	$^\circ\text{C}$

Electrical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Breakdown Voltage (Note 1)	$V_{(BR)R}$	60	-	-	V	$I_R = 0.5 \text{ mA}$
Forward Voltage Drop	V_F	-	-	0.68 0.57	V	$I_F = 5 \text{ A}, T_J = 25^\circ\text{C}$ $I_F = 5 \text{ A}, T_J = 125^\circ\text{C}$
Leakage Current (Note 1)	I_R	-	-	0.5 100	mA	$V_R = 60 \text{ V}, T_J = 25^\circ\text{C}$ $V_R = 60 \text{ V}, T_J = 125^\circ\text{C}$

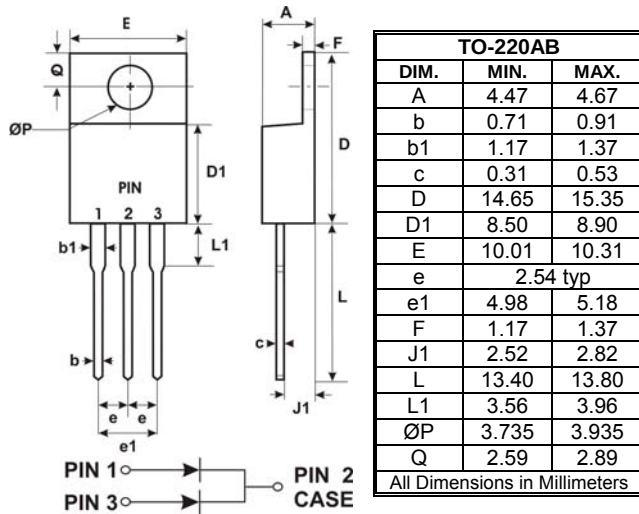
Notes:

1. Short duration pulse test used to minimize self-heating effect.
2. RoHS revision 13.2.2003. High temperature solder exemption applied, see *EU Directive Annex Note 7*.

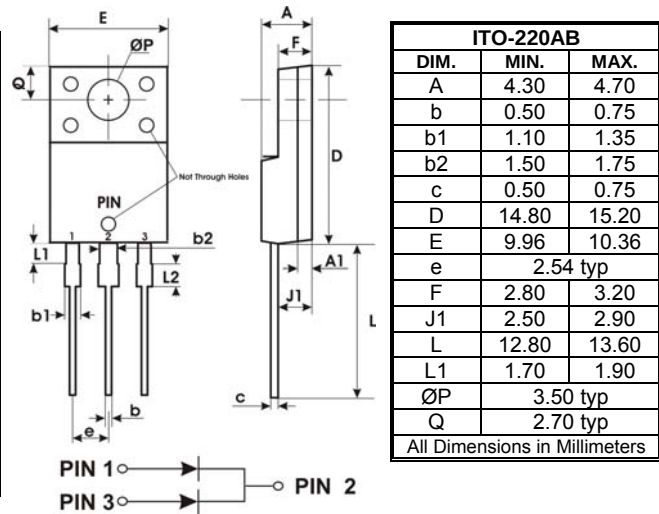
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Package Outline Drawings

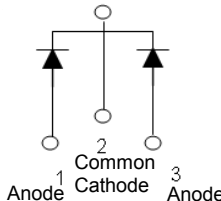
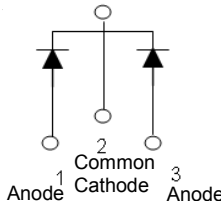
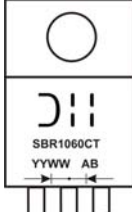
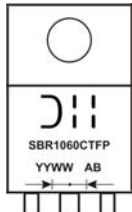
TO-220AB



ITO-220AB



Marking, Polarity, Weight & Ordering Information

	SBR1060CT	SBR1060CTFP
Case Style	 TO-220AB	 ITO-220AB
Polarity	Case 	
Marking		
Weight	2.1g	1.9g

Ordering Information	SBR1060CT 50 pieces/tube	SBR1060CTFP 50 pieces/tube
Date Code	YY = Last two digits of year, ex = 06 = 2006 WW = Week (01-52)	
Other Marking Information	A = Foundry Code B = Assembly Code	

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