

## Maximum Ratings (Per Leg) @T<sub>A</sub> = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitance load, derate current by 20%.				
Characteristic		Symbol	Value	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage		V <sub>RRM</sub> V <sub>RWM</sub> V <sub>RM</sub>	100	V
Average Rectified Output Current	Per Leg Total	IO	5 10	А
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load		I <sub>FSM</sub>	150	А
Peak Repetitive Reverse Surge Current (2µS-1kHz)		I <sub>RRM</sub>	3	A
Isolation Voltage (ITO-220AB Only) From terminal to heatsink t = 3 sec.		V <sub>AC</sub>	2000	V

# Thermal Characteristics (Per Leg)

Characteristic	Symbol	Value	Unit
Typical Thermal Resistance Package = TO-220AB Package = ITO-220AB	$R_{ ext{ heta}JC}$	2 4	°C/W
Operating and Storage Temperature Range	TJ, T <sub>STG</sub>	-65 to +175	°C

## Electrical Characteristics (Per Leg) @T<sub>A</sub> = 25°C unless otherwise specified

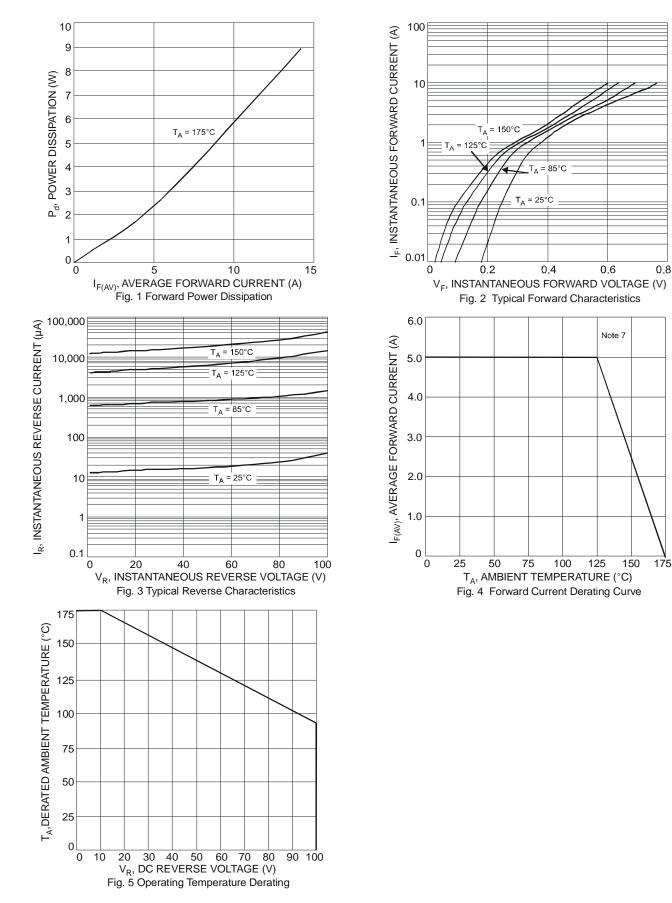
Characteristic	Symbol	Min	Тур	Max	Unit	Test Condition
Forward Voltage Drop	V <sub>F</sub>	-	- 0.53 -	0.67 0.56 0.82	V	I <sub>F</sub> = 5A, T <sub>J</sub> = 25°C I <sub>F</sub> = 5A, T <sub>J</sub> = 125°C I <sub>F</sub> = 10A, T <sub>J</sub> = 25°C
Leakage Current (Note 6)	I <sub>R</sub>	-	-	0.2 25	mA	$V_R = 100V, T_J = 25^{\circ}C$ $V_R = 100V, T_J = 125^{\circ}C$

Notes: 6. Short duration pulse test used to minimize self-heating effect.

7. Using heatsink (by Black Aluminum, 45mm \* 20mm \* 12mm)



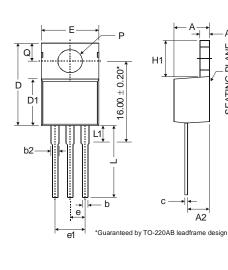
### SBR10U100CT SBR10U100CTFP

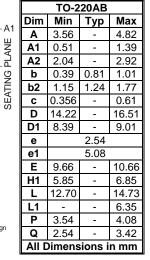


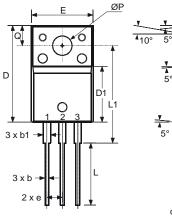
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# **Package Outline Dimensions**







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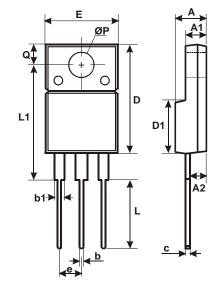
7

5

A2

C→ I∢

[	ITO-220AB				
A1	Dim	Min	Тур	Max	
	Α	4.50	4.70	4.90	
	A1	3.04	3.24	3.44	
	A2	2.56	2.76	2.96	
	b	0.50	0.60	0.75	
	b1	1.10	1.20	1.35	
	с	0.50	0.60	0.70	
<u> </u>	D	15.67	15.87	16.07	
5°	D1	8.99	9.19	9.39	
-	e	2.54			
	ш	9.91	10.11	10.31	
	L	9.45	9.75	10.05	
	L1	15.80	16.00	16.20	
	Р	2.98	3.18	3.38	
	Q	3.10	3.30	3.50	
	All Dimensions in mm				



ITO-220AB				
Alternate				
Dim	Dim Min			
Α	4.36	4.77		
A1	2.54	3.1		
A2	2.54	2.8		
b	0.55	0.75		
b1	1.2	1.5		
С	0.38	0.68		
D	14.5	15.5		
D1	8.38	8.89		
Е	9.72	10.27		
е	2.41	2.67		
L	9.87	10.67		
L1	15.8	17		
ØP	3.08	3.39		
q	2.6	3.0		
All Dimensions in mm				

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