

# Maximum Ratings (@T<sub>A</sub> = +25°C, unless otherwise specified.)

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

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>	60	V
Average Rectified Output Current @ T <sub>C</sub> = +110°C	lo	20	А
Non-Repetitive Avalanche Energy (T <sub>J</sub> = +25°C, I <sub>AS</sub> = 49A, L = 0.05mH, tp = 30µs)	E <sub>AS</sub>	60	mJ
Max. Avalanche Power (30µs, +25°C)	P <sub>ARM</sub>	4100	W
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I <sub>FSM</sub>	200	A
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**

Characteristic	Symbol	Value	Unit
Typical Thermal Resistance (per leg) Package = TO-220AB Package = ITO-220AB	$R_{ extsf{ heta}JC}$	2 4	°C/W
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-65 to +150	°C

#### Electrical Characteristics (@T<sub>A</sub> = +25°C, unless otherwise specified.)

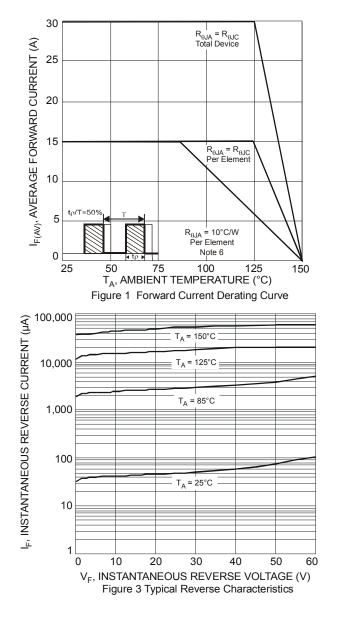
Characteristic	Symbol	Min	Тур	Max	Unit	Test Condition
Forward Voltage Drop	VF		 0.45 	0.57 0.47 0.71	V	$\begin{split} I_F &= 10A, \ T_J = +25^{\circ}C \\ I_F &= 10A, \ T_J = +125^{\circ}C \\ I_F &= 20A, \ T_J = +25^{\circ}C \end{split}$
Leakage Current (Note 6)	IR			0.5 100		$V_R = 60V, T_J = +25^{\circ}C$ $V_R = 60V, T_J = +125^{\circ}C$

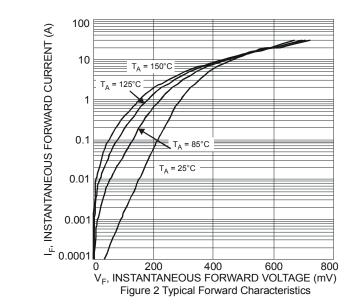
Note: 6. Short duration pulse test used to minimize self-heating effect.

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### SBR20U60CT SBR20U60CTFP





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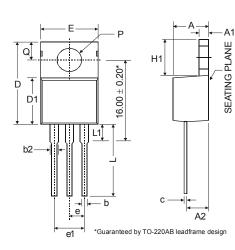
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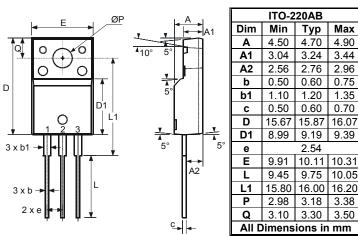
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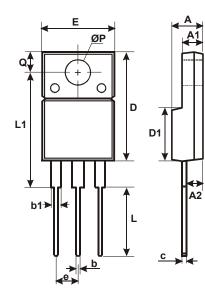
### **Package Outline Dimensions**

Please see AP02002 at http://www.diodes.com/datasheets/ap02002.pdf for latest version.



TO-220AB				
Dim	Min	Тур	Max	
Α	3.56	1	4.82	
A1	0.51	-	1.39	
A2	2.04	-	2.92	
b	0.39	0.81	1.01	
b2	1.15	1.24	1.77	
С	0.356	1	0.61	
D	14.22	-	16.51	
D1	8.39	-	9.01	
е	2.54			
e1	5.08			
Ε	9.66	-	10.66	
H1	5.85	1	6.85	
L	12.70	-	14.73	
L1	-	-	6.35	
Ρ	3.54	-	4.08	
Q	2.54	-	3.42	
All Dimensions in mm				





-					
11	ITO-220AB				
Alternate					
Dim	Min	Max			
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			
E	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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