

Maximum Ratings (Per Leg) ($@T_A = +25^{\circ}C$, 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 _{RRM} V _{RWM} V _{RM}	45	V
Average Rectified Output Current	(Per Leg) (Total)	Ιo	20 40	А
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load		I _{FSM}	280	А

Thermal Characteristics (Per Leg)

Characteristic	Symbol	Value	Unit
Typical Thermal Resistance Junction to Case (Note 6)	R _{θJC}	2	°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-65 to +150	°C

Electrical Characteristics (Per Leg) (@T_A = +25°C, unless otherwise specified.)

Characteristic	Symbol	Min	Тур	Max	Unit	Test Condition
Forward Voltage Drop	VF	—	0.47	0.52 0.49	V	I _F = 20A, T _J = +25°C I _F = 20A, T _J = +125°C
Leakage Current (Note 7)	I _R	_	0.2	0.6 200	mA	$V_R = 45V, T_J = +25^{\circ}C$ $V_R = 45V, T_J = +125^{\circ}C$

Notes: 6. Test with Aluminum heatsink 50 x 50 x 23mm.

7. Short duration pulse test used to minimize self-heating effect.



SBR40U45CT

T_J = 150°C

T_J = 125°C

 $T_{J} = 100^{\circ}C$

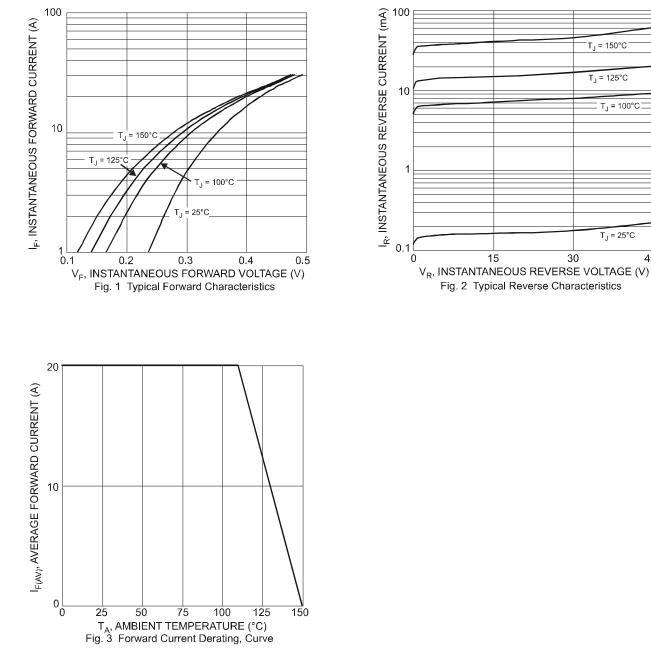
T_J = 25°C

45

30

15

Fig. 2 Typical Reverse Characteristics

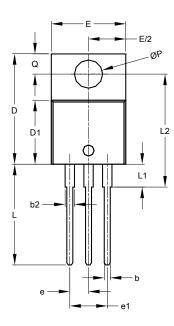




Package Outline Dimensions Please see AP02002 at http://www.diodes.com/datasheets/ap02002.pdf for the latest version.

H1

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TO-220AB

A2	

TO-220AB					
Dim	Min	Max	Тур		
Α	3.56	4.82			
A1	0.51	1.39			
A2	2.04	2.92			
b	0.39	1.01	0.81		
b2	1.15	1.77	1.24		
с	0.356	0.61			
D	14.22	16.51	_		
D1	8.39	9.01			
D2	11.45	12.87	_		
e			2.54		
e1			5.08		
ш	9.66	10.66			
E1	6.86	8.89			
H1	5.85	6.85	_		
L	12.70	14.73	—		
L1	_	6.35	_		
L2	15.80	16.20	16.00		
Ρ	3.54	4.08	_		
q	2.54	3.42	_		
All Dimensions in mm					



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