Maximum Ratings (Per Leg) (@T_A = +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_{RRM} V_{RWM} V_{RM}	150	V
Average Rectified Output Current	(Per Leg) (Total)	I_O	10 20	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load		I_{FSM}	200	A
Peak Repetitive Reverse Surge Current (2μS - 1Khz)		I_{RRM}	3	A

Thermal Characteristics (Per Leg)

Characteristic	Symbol	Value	Unit
Typical Thermal Resistance TO-220AB ITO-220AB	$R_{\theta JC}$	 2 4	°C/W
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +175	°C

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

Characteristic	Symbol	Min	Typ	Max	Unit	Test Condition
Forward Voltage Drop (Per Leg)	V_F	—	— 0.62	0.78 0.65	V	I_F = 10A, T_J = +25°C I_F = 10A, T_J = +125°C
Leakage Current (Note 6)	I_R	—	—	0.1 15	mA	V_R = 150V, T_J = +25°C V_R = 150V, T_J = +125°C

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

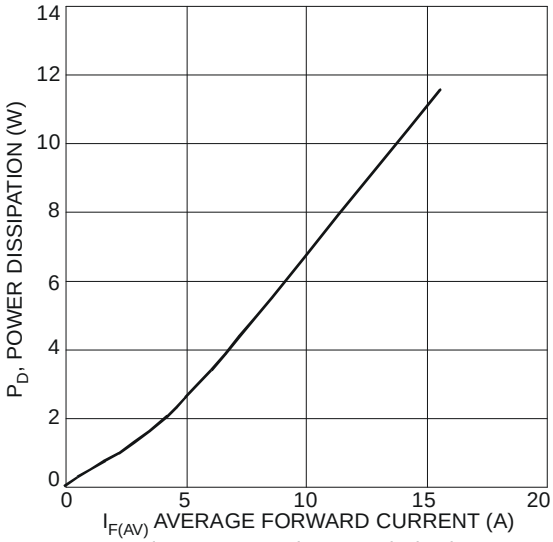


Figure 1 Forward Power Dissipation

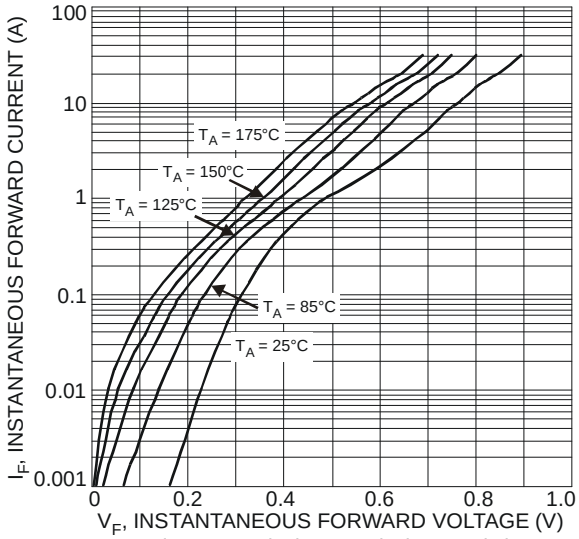


Figure 2 Typical Forward Characteristics

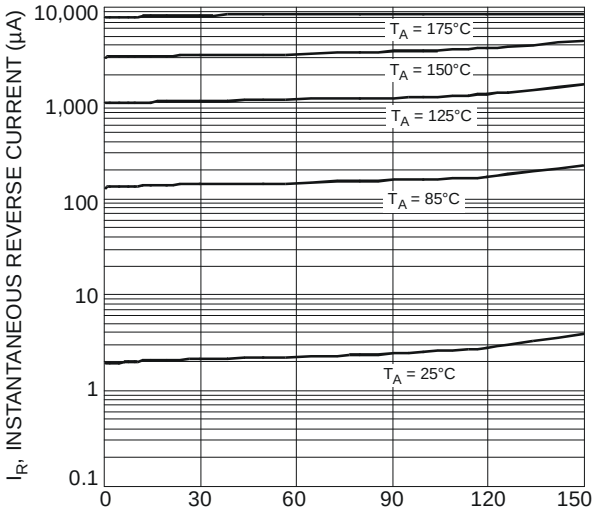


Figure 3 Typical Reverse Characteristics

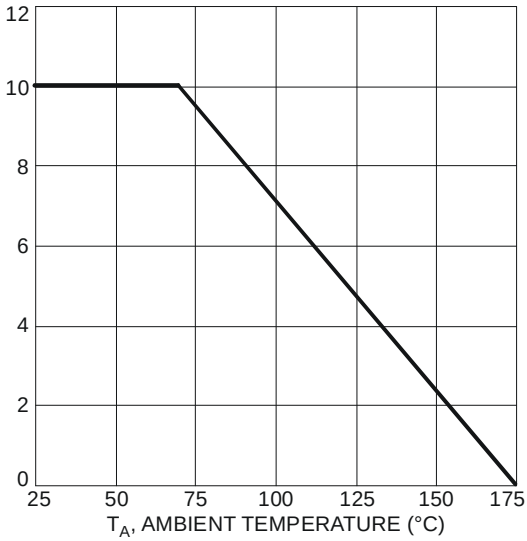
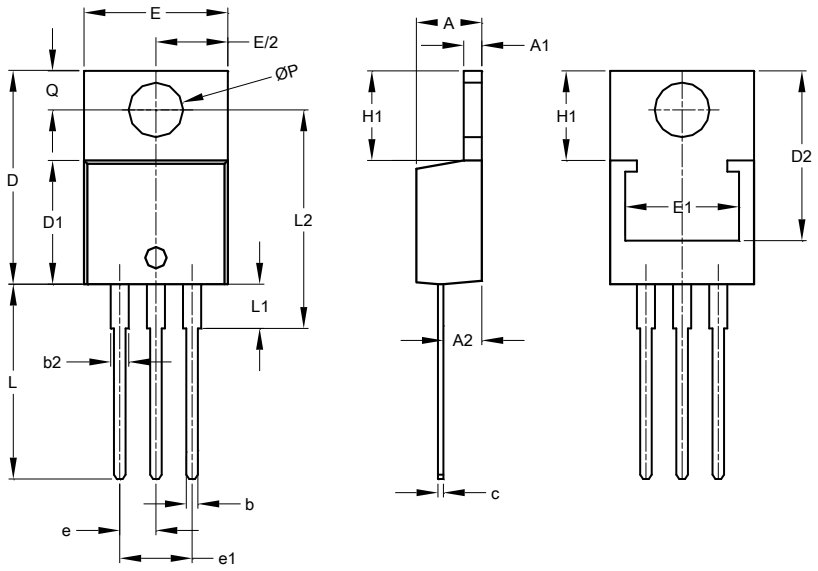


Figure 4 Forward Current Derating Curve

Package Outline Dimensions

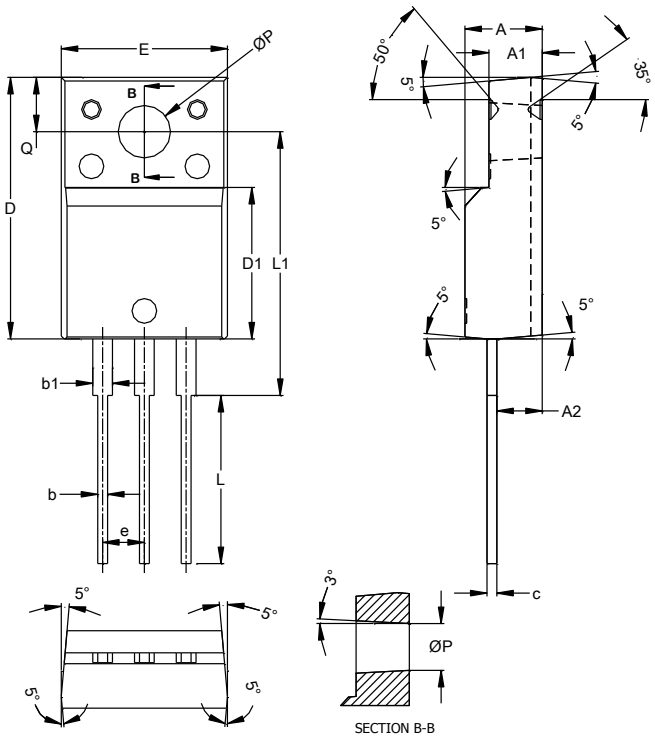
Please see AP02002 at http://www.diodes.com/datasheets/ap02002.pdf for the latest version.

TO220AB



TO220AB			
Dim	**Min**	**Max**	**Typ**
A	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
c	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
E	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
P	3.54	4.08	–
Q	2.54	3.42	–
All Dimensions in mm			

ITO220AB

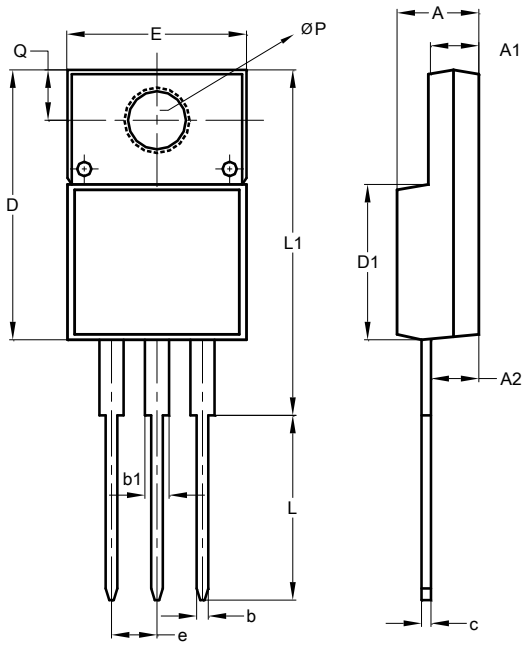


ITO220AB			
Dim	**Min**	**Max**	**Typ**
A	4.50	4.90	4.70
A1	3.04	3.44	3.24
A2	2.56	2.96	2.76
b	0.50	0.75	0.60
b1	1.10	1.35	1.20
c	0.50	0.70	0.60
D	15.67	16.07	15.87
D1	8.99	9.39	9.19
E	9.91	10.31	10.11
e	–	–	2.54
L	9.45	10.05	9.75
L1	15.80	16.20	16.00
P	2.98	3.38	3.18
Q	3.10	3.50	3.30
All Dimensions in mm			

Package Outline Dimensions (Continued)

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

ITO220AB (Type E)



ITO220AB (Type E)		
Dim	**Min**	**Max**
A	4.36	4.77
A1	2.54	3.10
A2	2.54	2.80
b	0.55	0.75
b1	1.20	1.50
c	0.38	0.68
D	14.50	15.50
D1	8.38	8.89
e	2.41	2.67
E	9.72	10.27
L	9.87	10.67
L1	15.8	17.00
P	3.08	3.39
Q	2.60	3.00
All Dimensions in mm		

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