

Maximum Ratings (Per Leg) @ $T_A = 25^\circ\text{C}$ 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	V_{RRM}	200	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_{RM}		
Average Rectified Output Current	I_O	5	A
		10	
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I_{FSM}	80	A

Thermal Characteristics (Per Leg)

Characteristic	Symbol	Value	Unit
Maximum Thermal Resistance (per leg)	$R_{\theta JC}$	2	$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +175	$^\circ\text{C}$

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

Characteristic	Symbol	Min	Typ	Max	Unit	Test Condition
Forward Voltage Drop (Per Leg)	V_F	-	0.85 0.69	0.92 0.74	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 4)	I_R	-	-	50 10	μA mA	$V_R = 200\text{V}, T_J = 25^\circ\text{C}$ $V_R = 200\text{V}, T_J = 125^\circ\text{C}$
Reverse Recovery Time	t_{rr}	-	15	20	ns	$I_F = 1\text{A}, V_R = 30\text{V},$ $di/dt = 100\text{A}/\mu\text{s}, T_J = 25^\circ\text{C}$

Notes: 4. Short duration pulse test used to minimize self-heating effect.

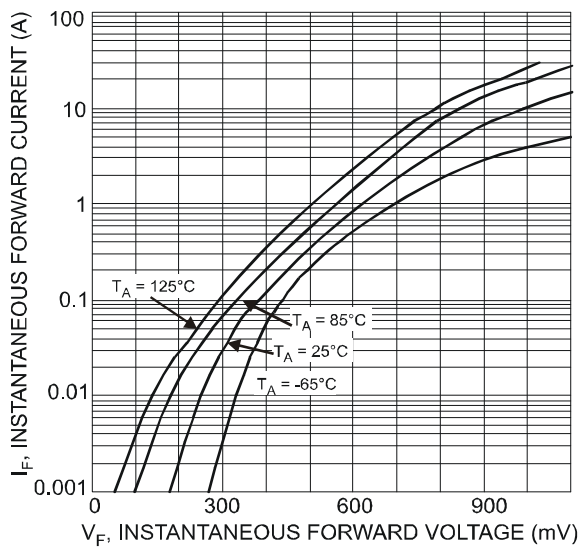


Fig. 1 Typical Forward Characteristics

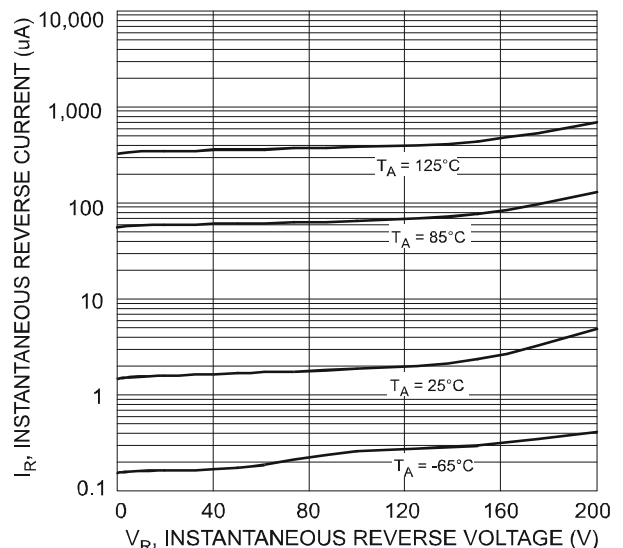


Fig. 2 Typical Reverse Characteristics

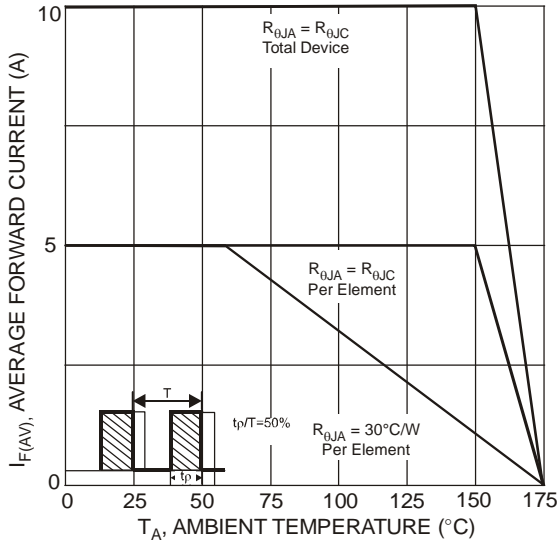
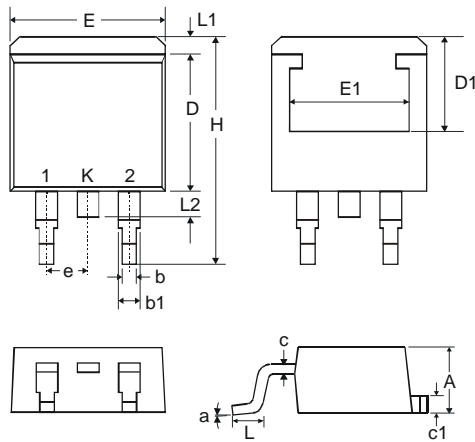


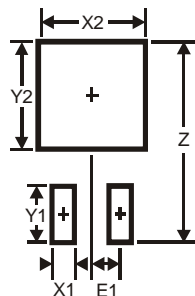
Fig. 3 Forward Current Derating Curve

Package Outline Dimensions



D ² PAK		
Dim	Min	Max
A	4.07	4.82
b	0.51	0.99
b1	1.15	1.77
c	0.356	0.58
c1	1.143	1.65
D	8.39	9.65
D1	6.55	—
E	9.66	10.66
E1	6.23	—
e	2.54 Typ	
H	14.61	15.87
L	1.78	2.79
L1	—	1.67
L2	—	1.77
a	0 $^{\circ}$	8 $^{\circ}$
All Dimensions in mm		

Suggested Pad Layout



Dimensions	Value (in mm)
Z	16.9
X1	1.1
X2	10.8
Y1	3.5
Y2	7.01
E1	2.5

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