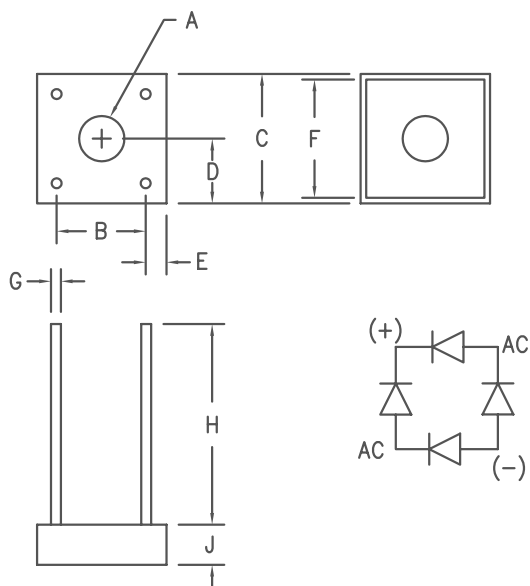


Fast Recovery Bridge Rectifiers VJ248XM — VJ648XM



Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	.137	.167	3.84	2.21	Dia.
B	.411	.441	10.44	11.20	
C	.600	.620	---	---	
D	.295	.310	---	---	
E	.076	.096	---	---	
F	.545	.555	13.85	14.10	
G	.076	.096	.970	1.07	
H	1.0 Min.		25.40 Min.		
J	.195	.215	4.95	5.46	

Microsemi
Catalog Number

VJ248XM
VJ448XM
VJ648XM

Peak Reverse
Voltage

200V
400V
600V

- 10 Amps DC Output
- 80 Amp Surge Current
- V_{RRM} to 600V
- 2000V Isolation
- Glass Passivated Die

Electrical Characteristics

DC Current Output
Maximum surge current
Max. I^2t for Fusing
Max. peak forward voltage per leg
Max. peak reverse current per leg
Max. reverse recovery time

I_o 10 Amps
 I_{FSM} 80 Amps
 I^2t 27 A²s
 V_{FM} 1.5 Volts
 I_{RM} 10 μ A
 t_{rr} 200 nS

$T_C = 70^\circ\text{C}$
8.3ms, half sine
 $I_{FM} = 1.0\text{A}; T_J = 25^\circ\text{C}^*$
 $V_{RRM}, T_J = 25^\circ\text{C}$
 $I_F = 1\text{A}, I_R = 2\text{A}, I_{RR} = .5\text{A}$

*Pulse test: Pulse width 300 μ sec, Duty cycle 2%

Thermal and Mechanical Characteristics

Storage temperature range
Operating junction temp range
Maximum thermal resistance
Mounting torque
Weight

T_{STG}
 T_J
 $R_{\theta JC}$

-55°C to 175°C
 -55°C to 150°C
 3°C/W Junction to case
12–15 inch pounds (#6 screw)
.14 ounces (4.5 grams) typical

4–20–05 Rev. 1

VJ248XM — VJ648XM

Figure 1
Typical Forward Characteristics — Per Leg

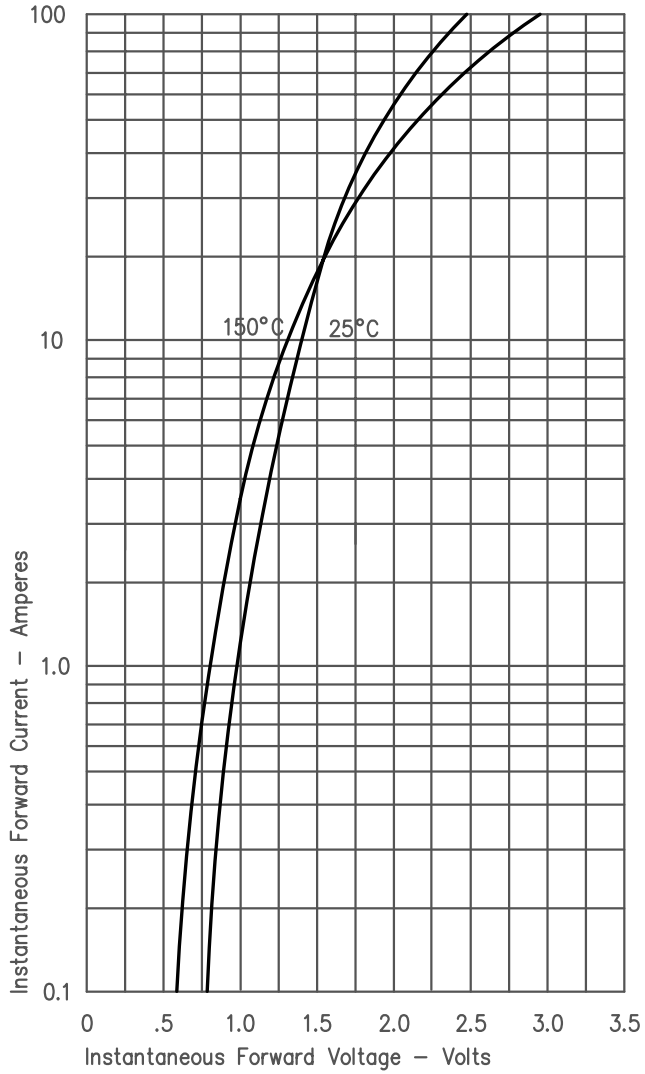


Figure 3
Forward Current Derating — Per Leg

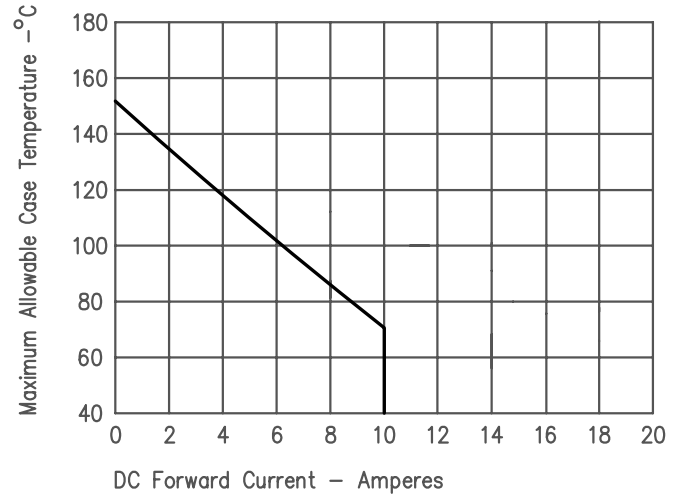


Figure 2
Typical Reverse Characteristics — Per Leg

