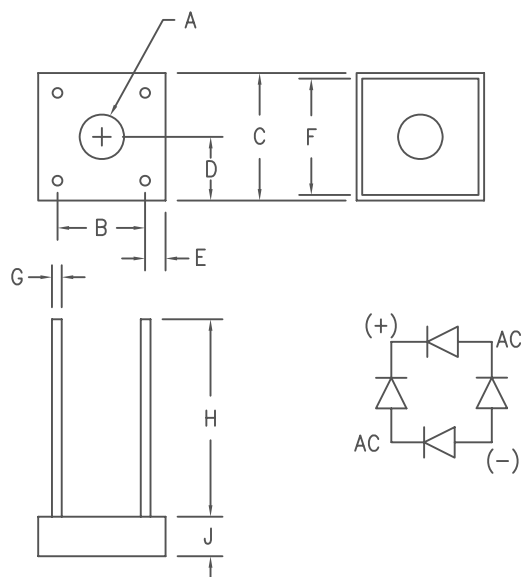


Fast Recovery Bridge Rectifiers VJ248XM — VJ648XM



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



8700 East Thomas Road, P.O. Box 1390
Scottsdale, AZ 85252
PH: (480) 941-6300
FAX: (480) 947-1503
www.microsemi.com

04-18-07 Rev. 2

VJ248XM — VJ648XM

Figure 1
Typical Forward Characteristics – Per Leg

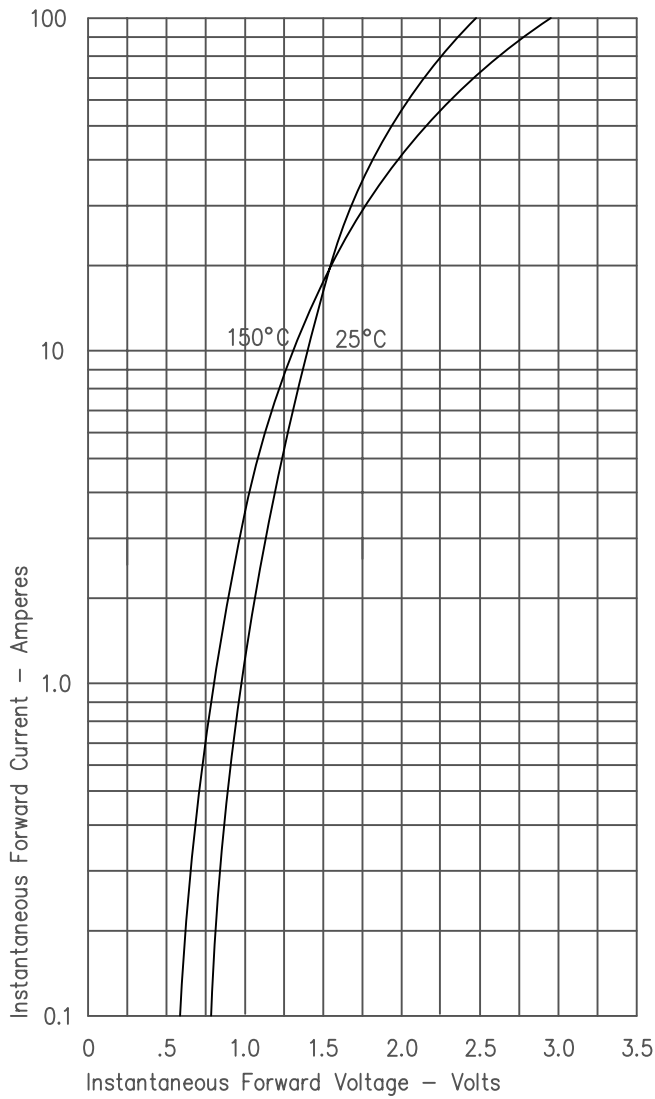


Figure 3
Forward Current Derating – Per Leg

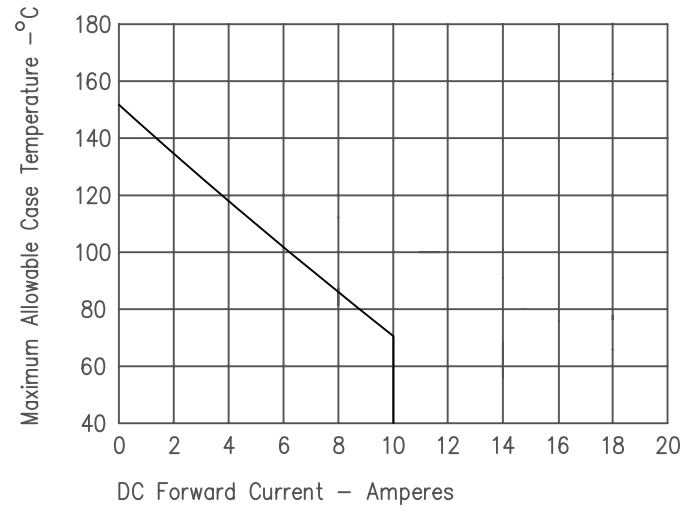


Figure 2
Typical Reverse Characteristics – Per Leg

