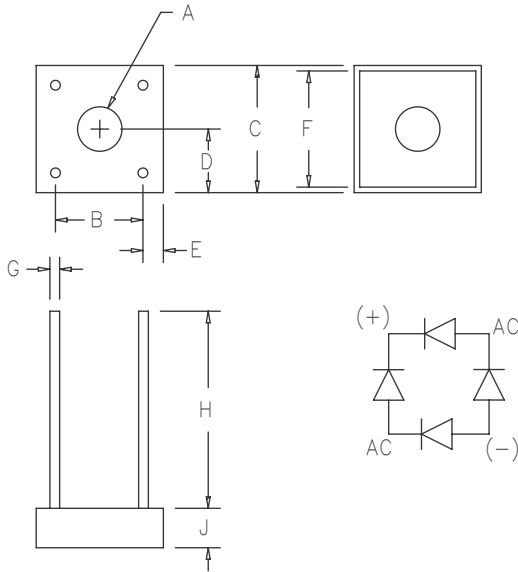


# Bridge Rectifiers

## VJ248M — VJ1048M



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

VJ248M  
VJ448M  
VJ648M  
VJ848M  
VJ1048M

Peak Reverse  
Voltage

200V  
400V  
600V  
800V  
1000V

- 10 Amps DC Output
- 100 Amp Surge Current
- $V_{RRM}$  to 1000V
- 2000V Isolation
- Glass Passivated Die
- ROHS Compliant

### 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

$I_o$  10 Amps  
 $I_{FSM}$  100 Amps  
 $I^2t$  41 A<sup>2</sup>s  
 $V_{FM}$  1.3 Volts  
 $I_{RM}$  5 $\mu$ A

$T_C = 95^\circ\text{C}$   
8.3ms, half sine

$I_{FM} = 1.0A; T_J = 25^\circ\text{C}^*$   
 $V_{RRM}, T_J = 25^\circ\text{C}$

\*Pulse test: Pulse width 300 $\mu$ sec, Duty cycle 2%

### Thermal and Mechanical Characteristics

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

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

$-55^\circ\text{C}$  to  $175^\circ\text{C}$   
 $-55^\circ\text{C}$  to  $175^\circ\text{C}$   
3 $^\circ\text{C}/\text{W}$  Junction to case  
12–15 inch pounds (#6 screw)  
.14 ounces (4.5 grams) typical

# VJ248M — VJ1048M

Figure 1  
Typical Forward Characteristics — Per Leg

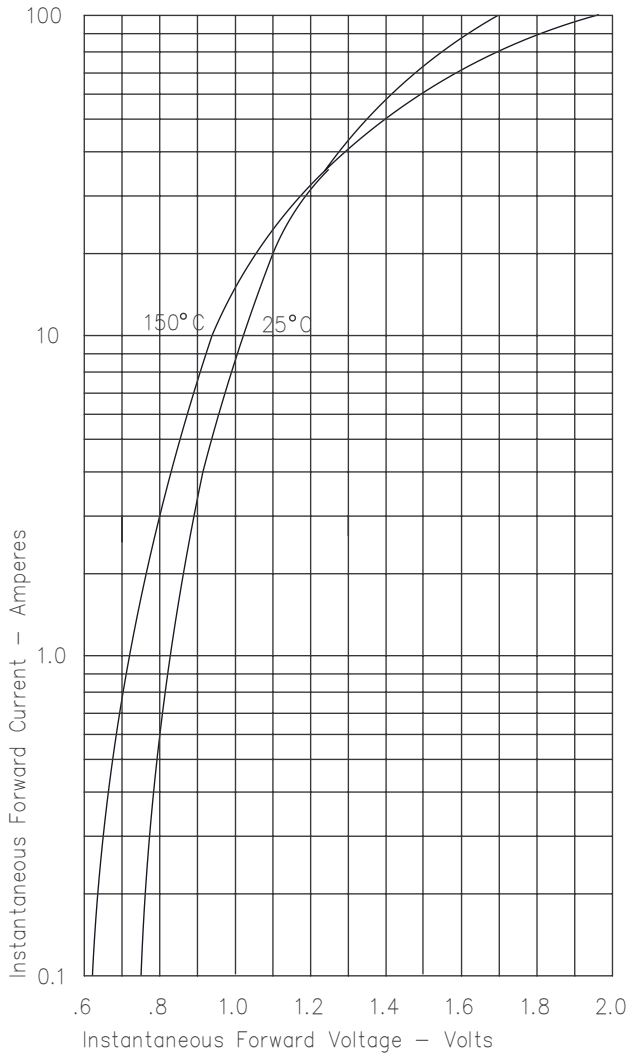


Figure 3  
Forward Current Derating — Per Leg

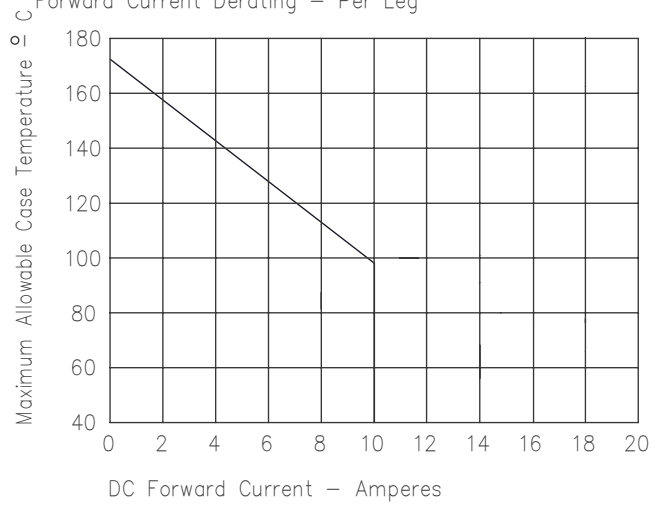
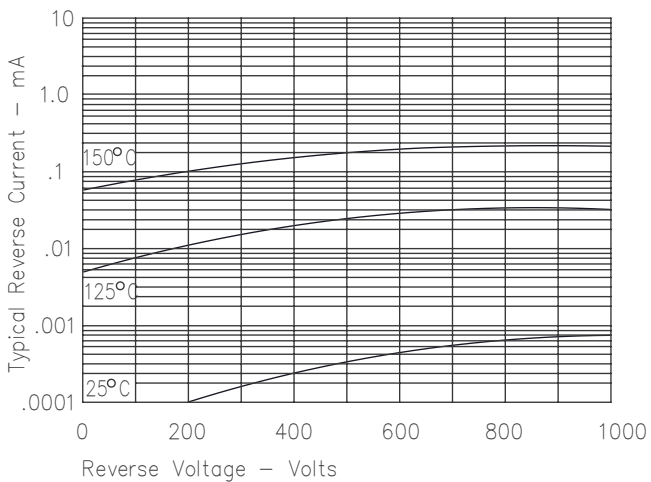


Figure 2  
Typical Reverse Characteristics — Per Leg



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