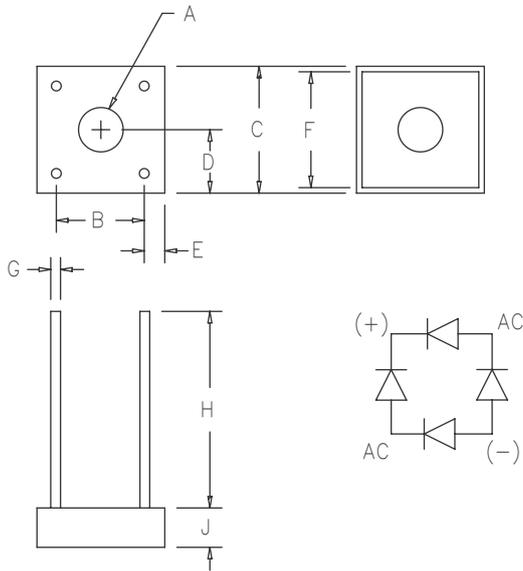


# Controlled Avalanche Bridge Rectifiers VJ247M — VJ847M



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

VJ247M  
VJ447M  
VJ647M  
VJ847M

Avalanche  
Voltage Range

250V – 700V  
450V – 900V  
660V – 1100V  
850V – 1300V

- 10 Amps DC Output
- 100 Amp Surge Current
- 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  $A^2s$   
 $V_{FM}$  1.3 Volts  
 $I_{RM}$  5 $\mu A$

$T_C = 80^\circ C$   
8.3ms, half sine

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

\*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

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

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

# VJ247M – VJ847M

Figure 1  
Typical Forward Characteristics – Per Leg

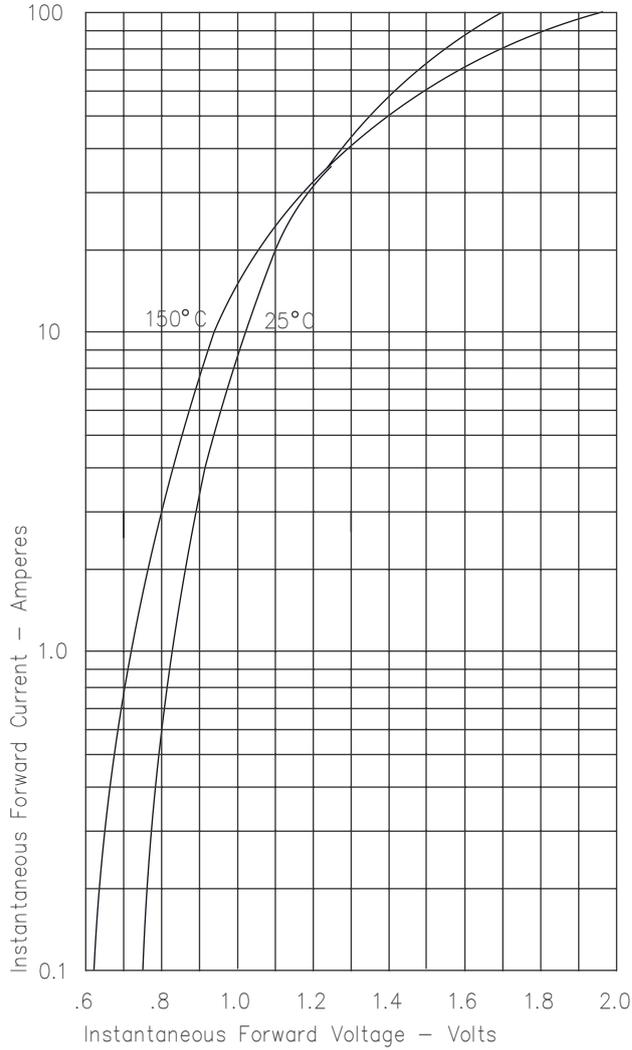
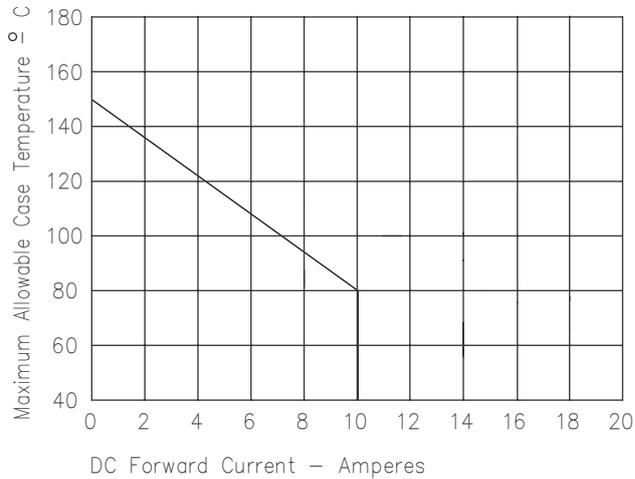


Figure 2  
Forward Current Derating – Per Leg



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