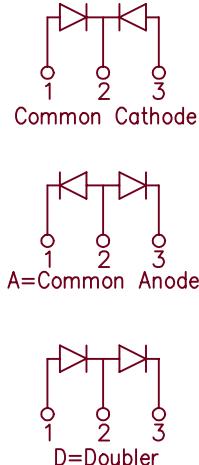
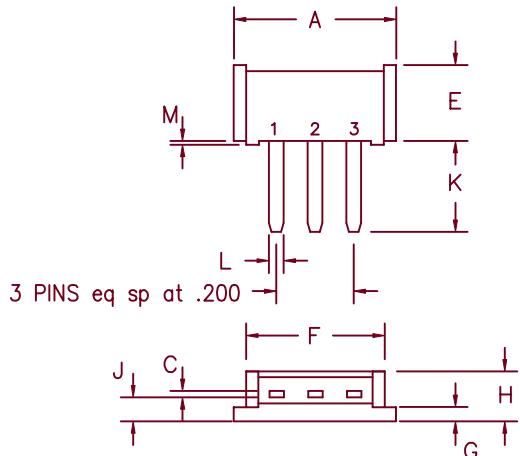


# Schottky MiniMod FST8230SM



Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	.765	.790	19.43	20.07	
C	.027	.037	0.69	0.94	
E	.340	.350	8.64	8.89	
F	.650	.670	16.51	17.02	
G	.065	.075	1.65	1.91	
H	.215	.235	5.46	5.97	
J	.110	.125	2.79	3.18	
K	.460	.485	11.68	12.32	
L	.065	.085	1.65	2.16	
M	.030	.040	0.76	1.02	

NOTES:

1. Baseplate Common with Pin 2
2. Lead Forming available. Consult Factory

Microsemi  
Catalog Number

FST8230SM\*

Working  
Peak Reverse  
Voltage

30V

Repetitive  
Peak Reverse  
Voltage

30V

- Schottky Barrier Rectifier
- Guard Ring Protection
- 2X40 Amperes avg.
- 150°C Junction Temperature
- Reverse Energy Tested
- Low Forward Voltage

\*Add the Suffix A for Common Anode, D for Doubler

## Electrical Characteristics

Average forward current per pkg  
Average forward current per leg  
Maximum surge current per leg  
Max repetitive peak reverse current per leg  
Max peak forward voltage per leg  
Max peak forward voltage per leg  
Max peak reverse current per leg  
Max peak reverse current per leg  
Typical reverse current per leg  
Typical junction capacitance per leg

|F(AV) 80 Amps  
|F(AV) 40 Amps  
|FSM 800 Amps  
|R(OV) 2 Amps  
VF<sub>M</sub> 0.42 Volts  
VF<sub>M</sub> 0.47 Volts  
|RM 300 mA  
|RM 5 mA  
|RM 3 mA  
C<sub>J</sub> 2400 pF

T<sub>C</sub> = 115°C, Square wave, R<sub>θJC</sub> = 0.5°C/W  
T<sub>C</sub> = 115°C, Square wave, R<sub>θJC</sub> = 1.0°C/W  
8.3 ms, half sine, T<sub>J</sub> = 150°C  
f = 1 KHZ, 25°C, 1 usec square wave  
| FM = 40A; T<sub>J</sub> = 150°C\*  
| FM = 40A; T<sub>J</sub> = 25°C\*  
V<sub>RRM</sub>, T<sub>J</sub> = 125°C\*  
V<sub>RRM</sub>, T<sub>J</sub> = 25°C  
V<sub>RRM</sub>, T<sub>J</sub> = 25°C  
V<sub>R</sub> = 5.0V, T<sub>C</sub> = 25°C

\*Pulse test: Pulse width 300 usec, Duty cycle 2%

## Thermal and Mechanical Characteristics

Storage temp range  
Operating junction temp range  
Max thermal resistance per leg  
Max thermal resistance per pkg  
Typical thermal resistance (greased)  
Weight

T<sub>STG</sub>  
T<sub>J</sub>  
R<sub>θJC</sub>  
R<sub>θJC</sub>  
R<sub>θCS</sub>  
-55°C to 175°C  
-55°C to 150°C  
1.0°C/W Junction to case  
0.5°C/W Junction to case  
0.3°C/W Case to sink  
0.3 ounce (8.4 grams) typical

# FST8230SM

Figure 1  
Typical Forward Characteristics – Per Leg

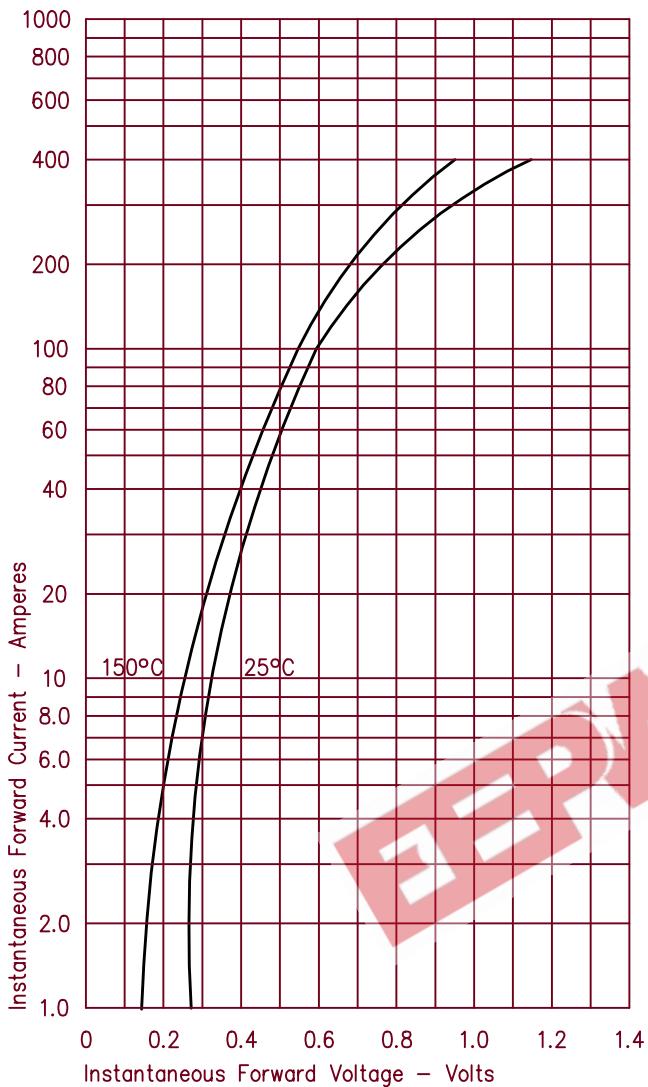


Figure 2  
Typical Reverse Characteristics – Per Leg

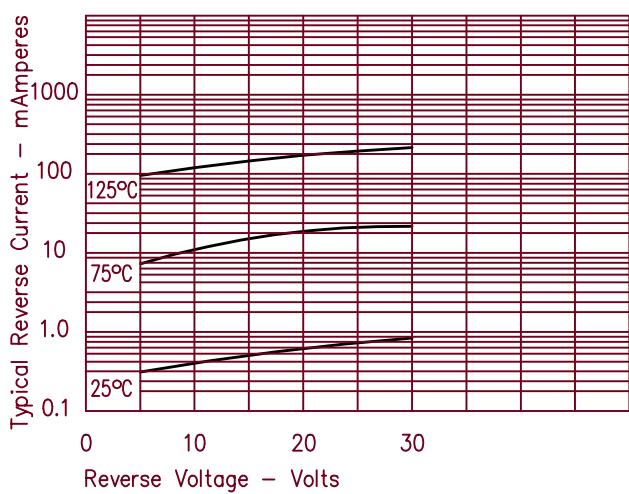


Figure 3  
Typical Junction Capacitance – Per Leg

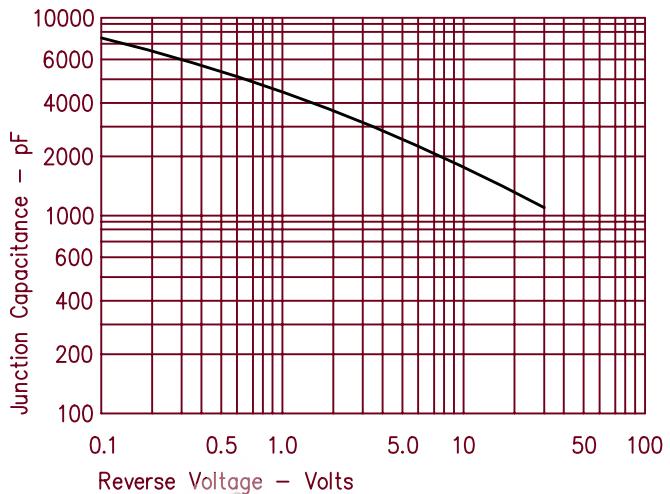


Figure 4  
Forward Current Derating – Per Leg

