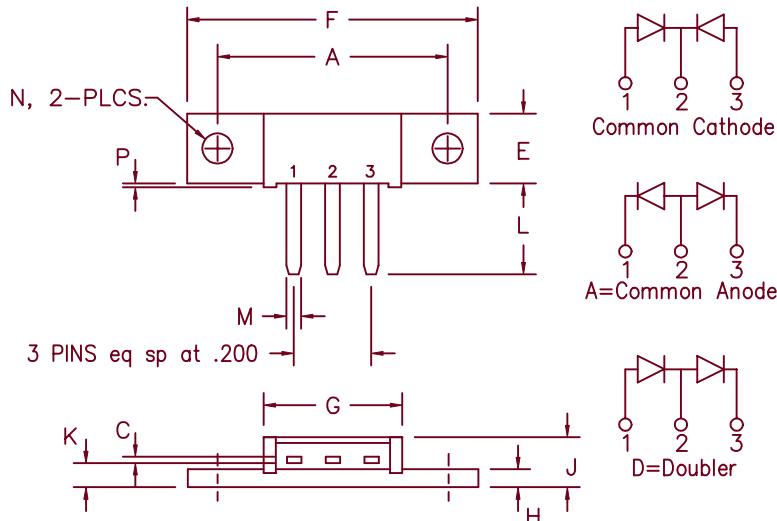


Schottky MiniMod

FST8230



Dim.	Inches		Millimeter		
	Minimum	Maximum	Minimum	Maximum	Notes
A	1.180	1.195	29.97	30.35	
C	.027	.037	0.69	0.94	
E	.350	.370	8.89	9.40	
F	1.490	1.510	37.85	38.35	
G	.695	.715	17.65	18.16	
H	.088	.098	2.24	2.49	
J	.240	.260	6.10	6.60	
K	.115	.135	2.92	3.43	
L	.460	.480	11.68	12.19	
M	.065	.085	1.65	2.16	
N	.151	.161	3.84	4.09	
P	.015	.025	0.38	0.64	Dia.

Note: Baseplate Common with Pin 2

Microsemi
Catalog Number

Working
Peak Reverse
Voltage

Repetitive
Peak Reverse
Voltage

FST8230*

30V

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

|F(AV) 80 Amps

T_C = 115°C, Square wave, R_{θJC} = 0.5°C/W

Average forward current per leg

|F(AV) 40 Amps

T_C = 115°C, Square wave, R_{θJC} = 1.0°C/W

Maximum surge current per leg

|FSM 800 Amps

8.3 ms, half sine, T_J = 150°C

Max repetitive peak reverse current per leg

|R(OV) 2 Amps

f = 1 KHZ, 25°C, 1 usec square wave

Max peak forward voltage per leg

|VFM 0.42 Volts

|FM = 40A: T_J = 150°C*

Max peak forward voltage per leg

|VFM 0.47 Volts

|FM = 40A: T_J = 25°C*

Max peak reverse current per leg

|RM 300 mA

|VRRM, T_J = 125°C*

Max peak reverse current per leg

|RM 5 mA

|VRRM, T_J = 25°C

Typical reverse current per leg

|RM 3 mA

|VRRM, T_J = 25°C

Typical junction capacitance per leg

C_J 2400 pF

V_R = 5.0V, T_C = 25°C

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

Thermal and Mechanical Characteristics

Storage temp range

T_{STG}

-55°C to 175°C

Operating junction temp range

T_J

-55°C to 150°C

Max thermal resistance per leg

R_{θJC}

1.0°C/W Junction to case

Max thermal resistance per pkg.

R_{θJC}

0.5°C/W Junction to case

Typical thermal resistance (greased)

R_{θCS}

0.3°C/W Case to sink

Mounting Base Torque

10 inch pounds maximum

Weight

0.3 ounce (8.4 grams) typical

FST8230

Figure 1
Typical Forward Characteristics – Per Leg

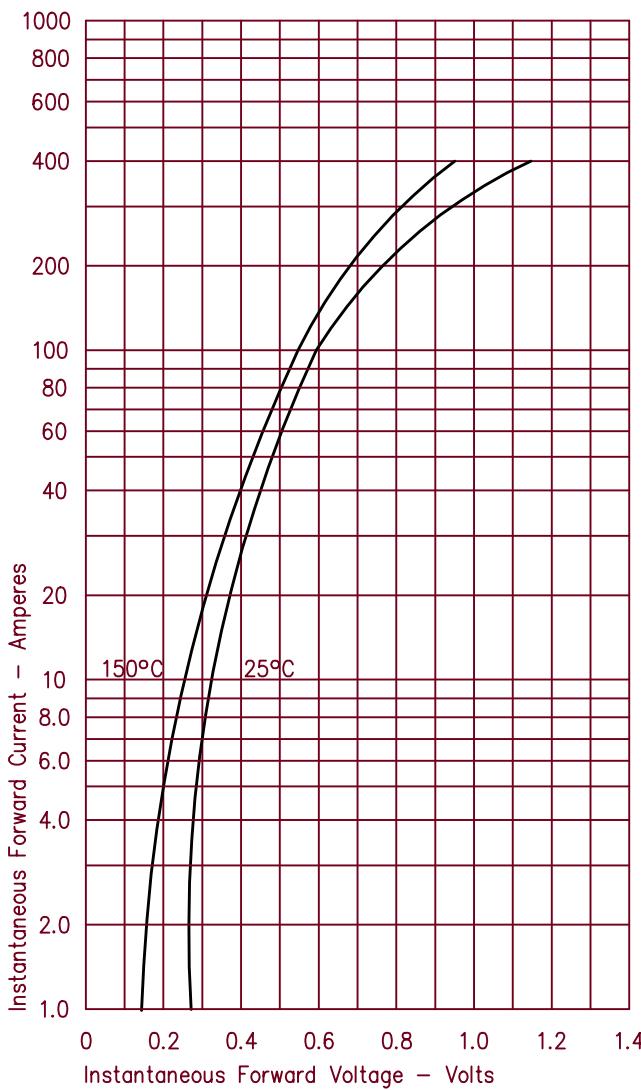


Figure 2
Typical Reverse Characteristics – Per Leg

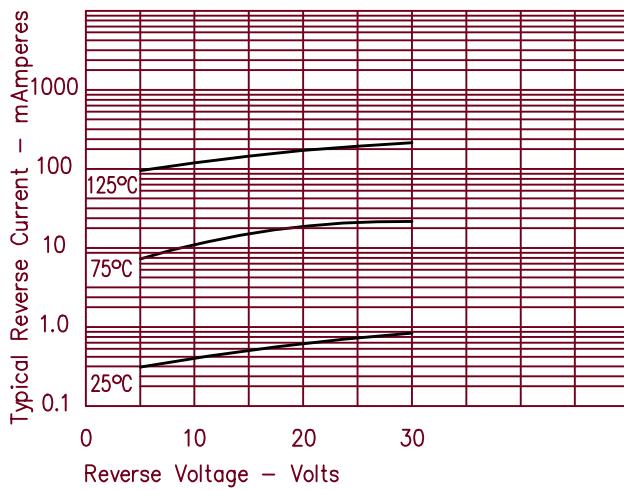


Figure 3
Typical Junction Capacitance – Per Leg

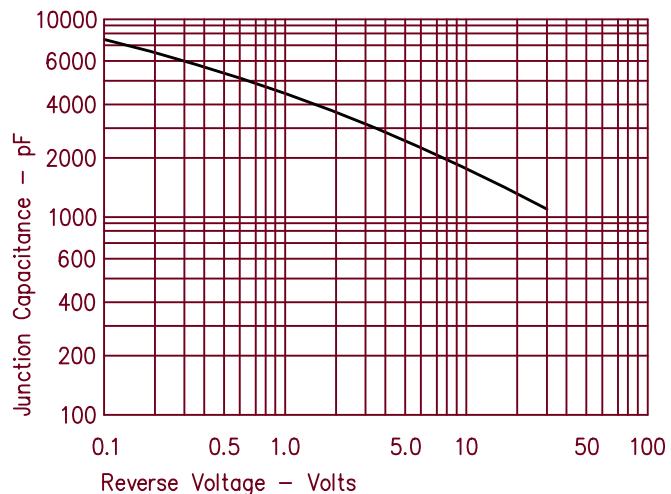


Figure 4
Forward Current Derating – Per Leg

