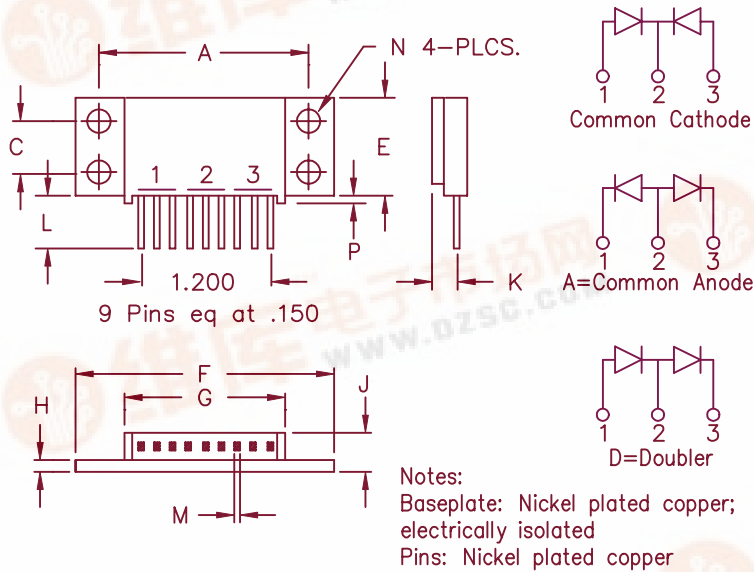


# Schottky PowerMod FST15230



Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	1.995	2.005	50.67	50.93	
C	0.495	0.506	12.57	12.83	
E	0.990	1.010	25.15	25.65	
F	2.390	2.410	60.71	61.21	
G	1.490	1.510	37.85	38.35	
H	0.120	0.130	3.05	3.30	
J	---	0.400	---	10.16	
K	0.240	0.260	6.10	6.60to	Lead $\varnothing$
L	0.490	0.510	12.45	12.95	
M	0.040	.050	1.02	1.27	Square Dia
N	0.175	0.195	4.45	4.95	
P	0.032	0.052	0.81	1.32	

Microsemi Catalog Number	Industry Part No.	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage
FST15230*	152CMQ030	30V	30V

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

- Schottky Barrier Rectifier
- Guard Ring for Reverse Protection
- Low forward voltage
- VRRM 30 Volts
- Electrically isolated base
- Reverse Energy Tested
- Center tap

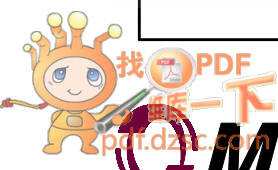
### Electrical Characteristics

Average forward current per pkg	I <sub>F(AV)</sub> 150 Amps	T <sub>C</sub> = 85°C, Square wave, R <sub>θJC</sub> = 0.5°C/W
Average forward current per leg	I <sub>F(AV)</sub> 75 Amps	T <sub>C</sub> = 85°C, Square wave, R <sub>θJC</sub> = 1.0°C/W
Maximum surge current per leg	I <sub>FSM</sub> 1000 Amps	8.3 ms, half sine T <sub>J</sub> = 150°C
Max repetitive peak reverse current per leg	I <sub>R(OV)</sub> 2 Amps	f = 1 KHz, 25°C, 1 μsec Square wave
Max peak forward voltage per leg	V <sub>FM</sub> .54 Volts	I <sub>FM</sub> = 75A: T <sub>J</sub> = 125°C*
Max peak forward voltage per leg	V <sub>FM</sub> .58 Volts	I <sub>FM</sub> = 75A: T <sub>J</sub> = 25°C*
Max peak reverse current per leg	I <sub>RM</sub> 300 mA	V <sub>R</sub> = 5.0V, T <sub>J</sub> = 25°C
Max peak reverse current per leg	I <sub>RM</sub> 1 mA	V <sub>RRM</sub> , T <sub>J</sub> = 125°C*
Typical junction capacitance per leg	C <sub>J</sub> 2400 pF	V <sub>RRM</sub> , T <sub>J</sub> = 25°C

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

### Thermal and Mechanical Characteristics

Storage temp range	T <sub>STG</sub>	-55°C to 175°C
Operating junction temp range	T <sub>J</sub>	-55°C to 150°C
Max thermal resistance per leg	R <sub>θJC</sub>	1.0°C/W Junction to case
Max thermal resistance per pkg.	R <sub>θJC</sub>	0.5°C/W Junction to case
Typical thermal resistance (greased)	R <sub>θCS</sub>	0.1°C/W Case to sink
Mounting torque		15-20 inch pounds
Weight		2.5 ounces (71 grams) typical



# FST15230

Figure 1  
Typical Forward Characteristics – Per Leg

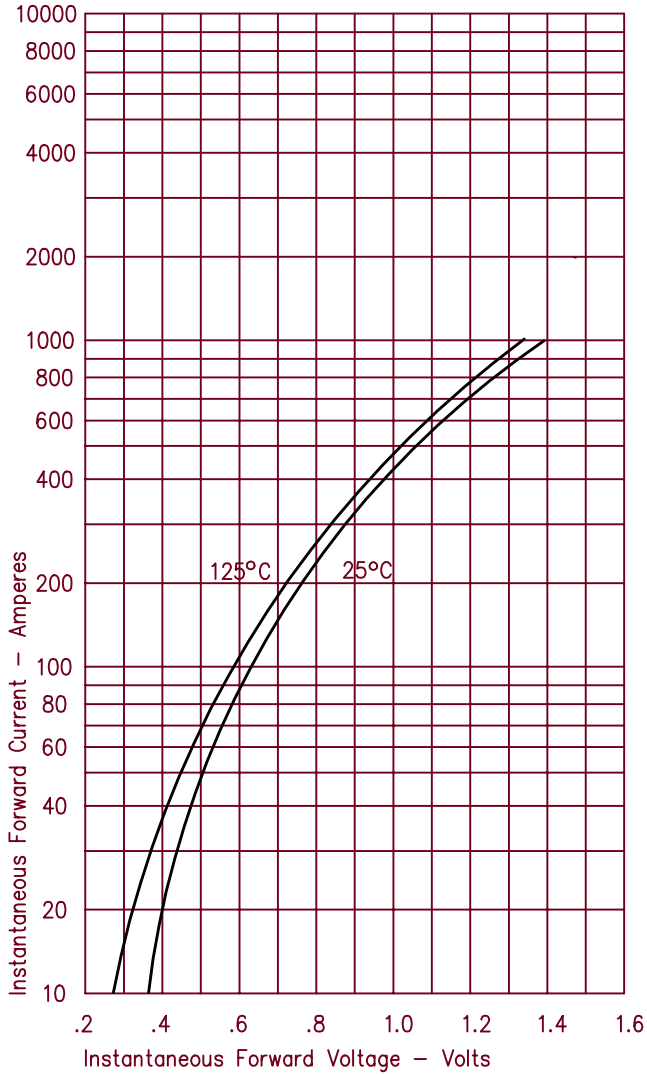


Figure 3  
Typical Junction Capacitance – Per Leg

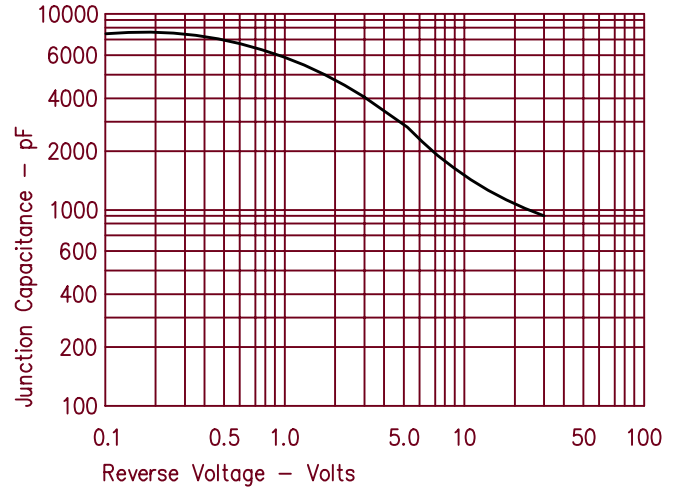


Figure 4  
Forward Current Derating – Per Leg

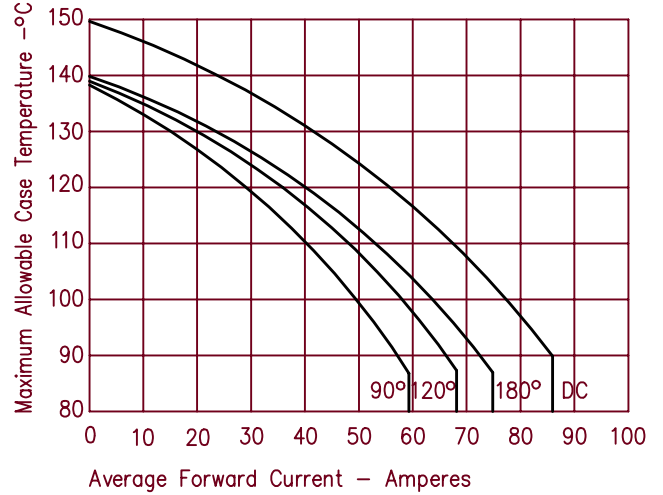


Figure 2  
Typical Reverse Characteristics – Per Leg

