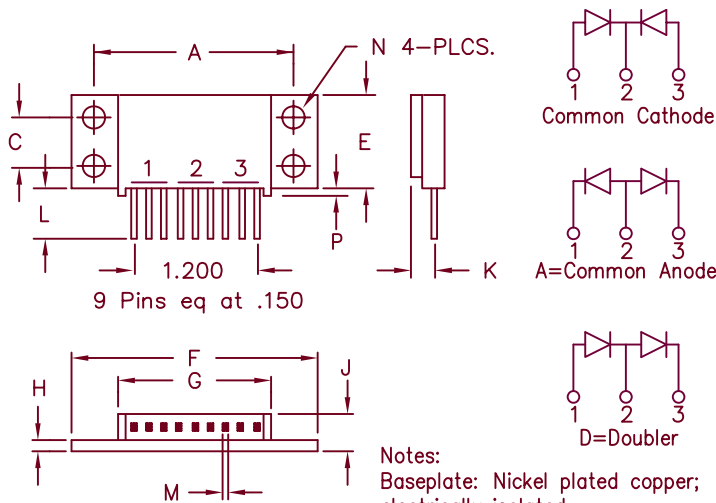


Schottky PowerMod 'OR'ing Rectifier FST15515



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 ϕ
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	

Notes:
Baseplate: Nickel plated copper;
electrically isolated
Pins: Nickel plated copper

Microsemi Catalog Number	Industry Part Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage
FST15515*	155CMQ015	15V	15V

*Add Suffix A for Common Anode, D for Doubler

- Schottky Barrier Rectifier
- Low Forward Voltage Drop
- Guard Ring for Reverse Protection
- 15V @ 75A/leg
- Electrically isolated base

Electrical Characteristics

Average forward current per leg	$I_{F(AV)}$ 75 Amps	$T_C = 107^\circ\text{C}$
Average forward current per pkg	$I_{F(AV)}$ 150 Amps	$T_C = 107^\circ\text{C}$
Maximum surge current per leg	I_{FSM} 1000 Amps	8.3 ms, half sine $T_J = 150^\circ\text{C}$
Max repetitive peak reverse current per leg	$I_{R(OV)}$ 2 Amps	$f = 1 \text{ KHz}, 25^\circ\text{C}, 1 \mu\text{sec Square wave}$
Max peak forward voltage per leg	V_{FM} 0.48 Volts	$I_{FM} = 75\text{A}; T_J = 25^\circ\text{C}^*$
Max peak forward voltage per leg	V_{FM} 0.36 Volts	$I_{FM} = 75\text{A}; T_J = 150^\circ\text{C}^*$
Max peak reverse current per leg	I_{RM} 5 mA	$V_{RRM}, T_J = 25^\circ\text{C}$
Minimum Isolation Voltage	V_{ISOL} 1000VDC	any terminal to base
Typical junction capacitance per leg	C_J 4600 pF	$V_R = 5.0\text{V}, T_J = 25^\circ\text{C}$

*Pulse test: Pulse width 300 μsec , 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	$R_{\theta JC}$	1.0 $^\circ\text{C}/\text{W}$ Junction to case
Max thermal resistance per pkg.	$R_{\theta JC}$	0.5 $^\circ\text{C}/\text{W}$ Junction to case
Typical thermal resistance (greased)	$R_{\theta CS}$	0.1 $^\circ\text{C}/\text{W}$ Case to sink
Mounting torque		15-20 inch pounds
Weight		2.5 ounces (71 grams) typical



8700 East Thomas Road, P.O. Box 1390
Scottsdale, AZ 85252
PH: (480) 941-6300
FAX: (480) 947-1503
www.microsemi.com

05-30-07 Rev. 1

FST15515

Figure 1
Typical Forward Characteristics

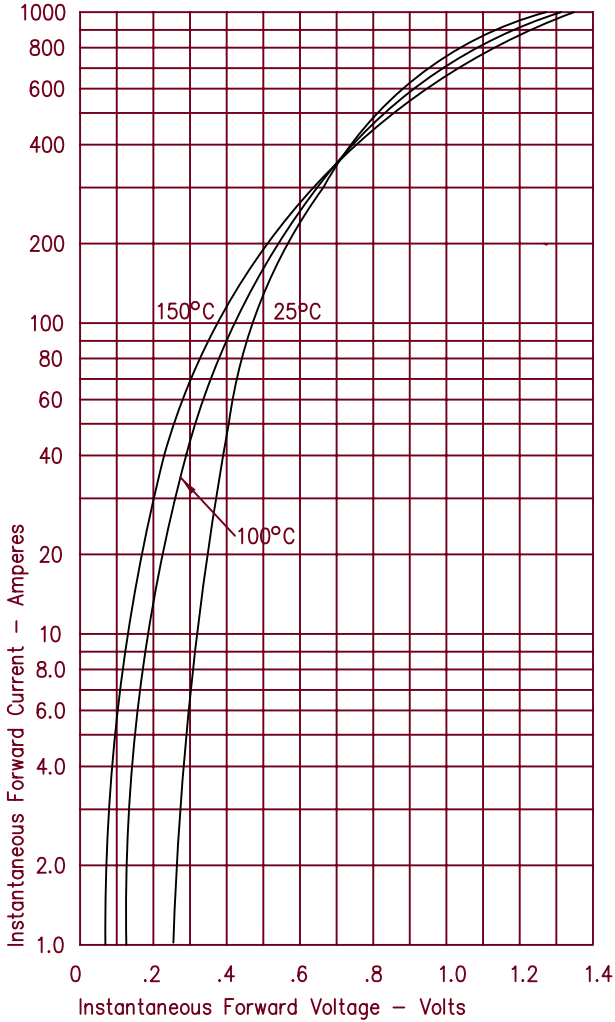


Figure 3
Typical Junction Capacitance

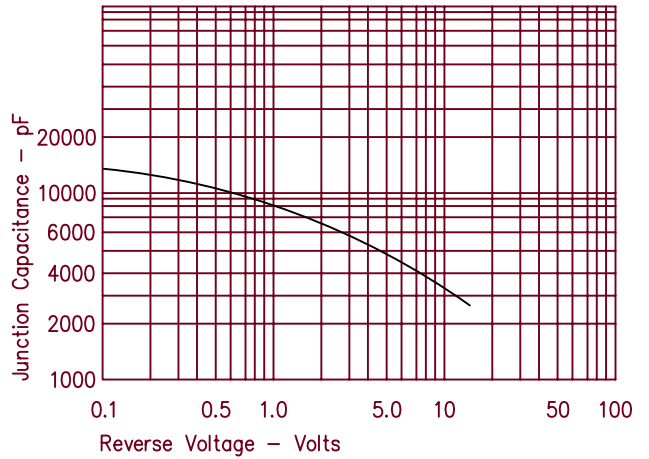


Figure 4
Forward Current Derating

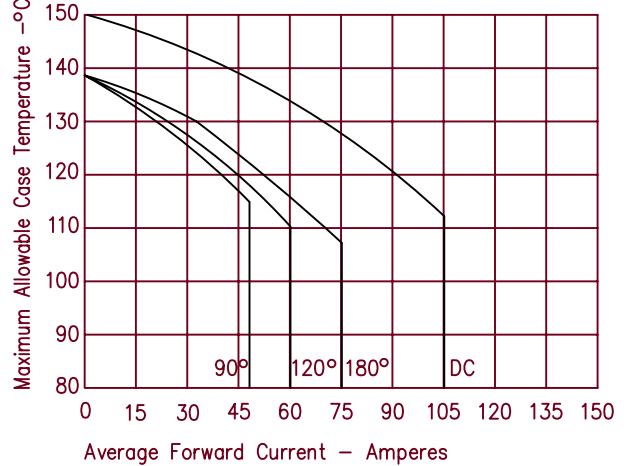


Figure 2
Typical Reverse Characteristics

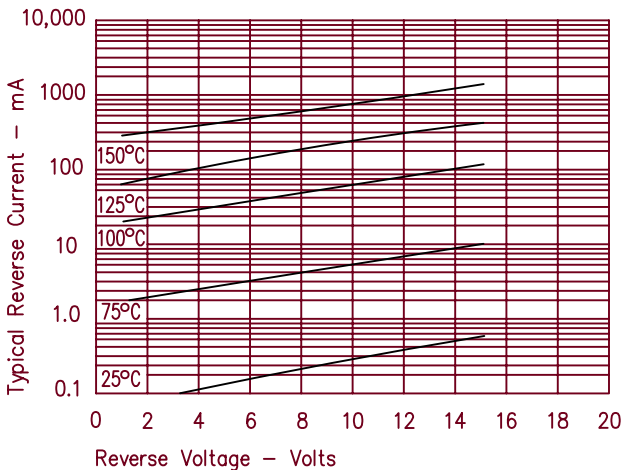


Figure 5
Maximum Forward Power Dissipation

