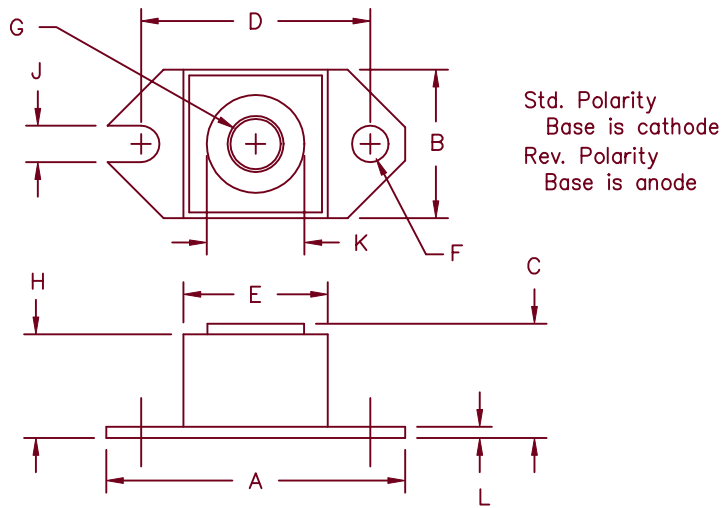


# 240 Amp Schottky Rectifier HS24515



Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	1.52	1.56	38.86	39.62	
B	.725	.775	18.42	19.69	
C	.605	.625	15.37	15.88	
D	1.177	1.197	29.90	30.41	
E	.745	.755	18.92	19.18	Sq.
F	.152	.162	3.86	4.11	Dia.
G		1/4-20	UNC-2B		
H	.540	.580	13.72	14.73	
J	.152	.162	3.86	4.11	
K	.495	.505	12.57	12.83	Dia.
L	.120	.130	3.05	3.30	

Microsemi Catalog Number	Industry Part Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage
HS24515*	245NQ015	15V	15V

\*Add Suffix R for Reverse Polarity

- Schottky Barrier Rectifier
- 0.28V Vf@240A, 100°C
- Optimized for OR'ing applications
- Guard Ring Reverse Protection
- 125°C Operation (Vr<5V)

## Electrical Characteristics

Average forward current	I <sub>F(AV)</sub> 240 Amps	T <sub>C</sub> = 78°C, V <sub>r</sub> = 5V
Average forward current	I <sub>F(AV)</sub> 240 Amps	T <sub>C</sub> = 69°C, V <sub>r</sub> = 15V
Maximum surge current	I <sub>FSM</sub> 3500 Amps	8.3ms, half sine, T <sub>J</sub> = 125°C
Maximum repetitive reverse current	I <sub>R(OV)</sub> 2 Amps	f = 1 KHZ, 25°C, 1us square wave
Max peak forward voltage	V <sub>FM</sub> 0.35 Volts	I <sub>FM</sub> = 240A: T <sub>J</sub> = 25°C*
Max peak forward voltage	V <sub>FM</sub> 0.28 Volts	I <sub>FM</sub> = 240A: T <sub>J</sub> = 100°C*
Max peak reverse current	I <sub>RM</sub> 4000 mA	V <sub>R</sub> = 5V, T <sub>J</sub> = 100°C*
Max peak reverse current	I <sub>RM</sub> 6500 mA	V <sub>RRM</sub> , T <sub>J</sub> = 100°C*
Max peak reverse current	I <sub>RM</sub> 75mA	V <sub>R</sub> = 5V, T <sub>J</sub> = 25°C
Max peak reverse current	I <sub>RM</sub> 150mA	V <sub>RRM</sub> , T <sub>J</sub> = 25°C
Typical junction capacitance	C <sub>J</sub> 21,700pF	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	T <sub>STG</sub>	-55°C to 150°C
Operating junction temp range	T <sub>J</sub>	-55°C to 125°C
Max thermal resistance	R <sub>ΘJC</sub>	0.24°C/W Junction to case
Typical thermal resistance (greased)	R <sub>ΘCS</sub>	0.12°C/W Case to sink
Terminal Torque		35-40 inch pounds
Mounting Base Torque		20-25 inch pounds
Weight		1.1 ounces (32 grams) typical

# HS24515

Figure 1  
Typical Forward Characteristics

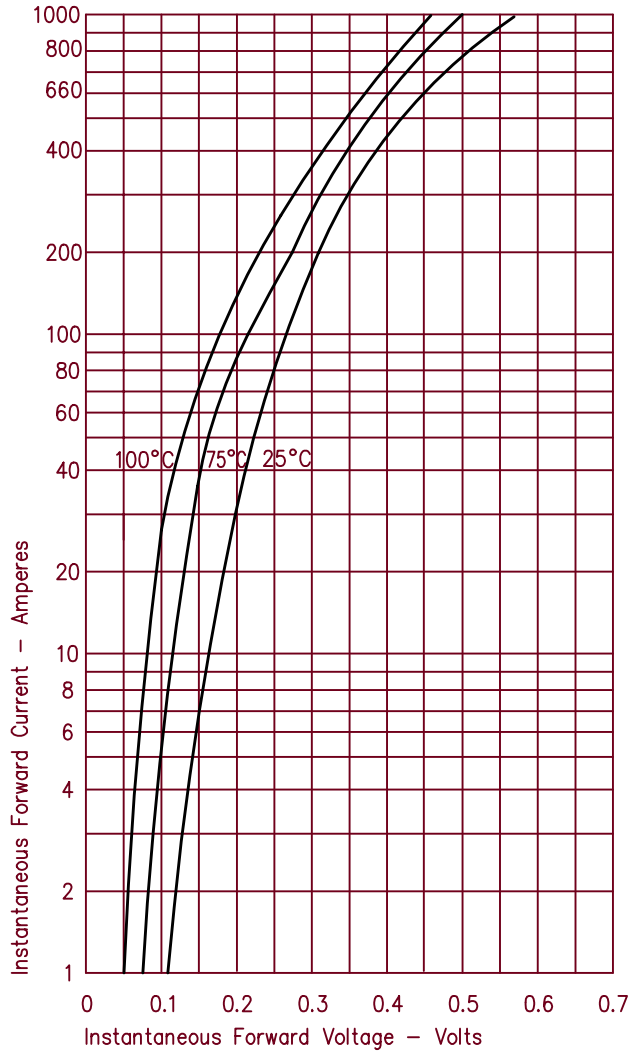


Figure 3  
Typical Junction Capacitance

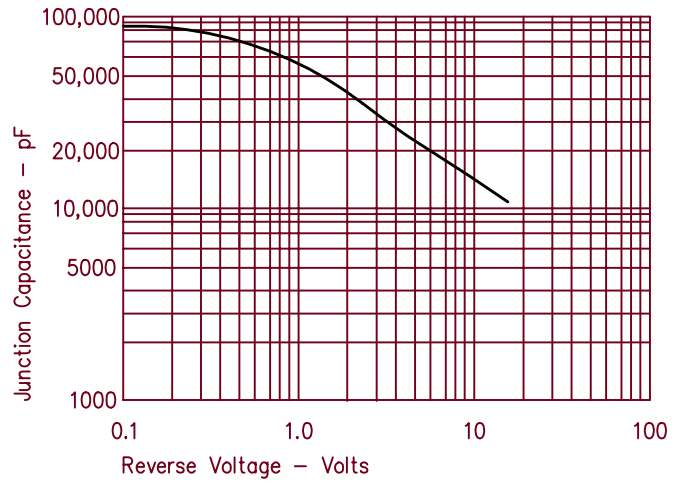


Figure 4  
Forward Current Derating

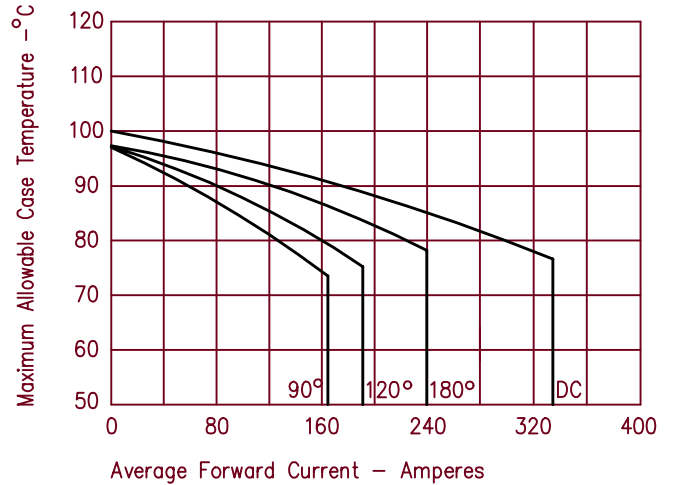


Figure 2  
Typical Reverse Characteristics

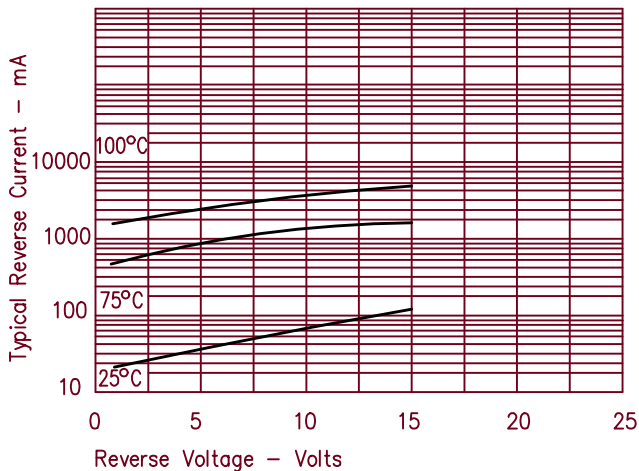


Figure 5  
Maximum Forward Power Dissipation

