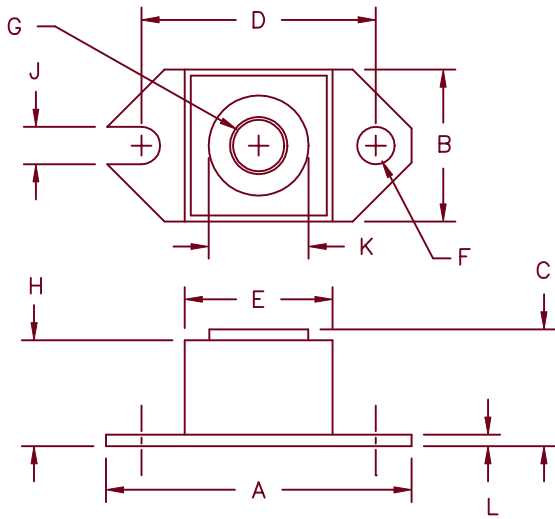


240 Amp Schottky Rectifier HS24035 — HS24045



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	1.182	1.192	30.02	30.28	
E	.745	.755	18.92	19.18	Sq.
F	.152	.160	3.86	4.06	Dia.
G		1/4-20	UNC-2B		
H	.570	.580	14.49	14.73	
J	.156	.160	3.96	4.06	
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
HS24035*	240NQ035, 244NQ035 MBRP20035L, MBRP30035L MBR24035	35V	35V
HS24040*	240NQ040, 244NQ040 MBR24040	40V	40V
HS24045*	240NQ045, 244NQ045 MBR24045	45V	45V

*Add suffix R for Reverse Polarity

- Schottky Barrier Rectifier
- Guard ring protection
- Low forward voltage
- V_{RRM} – 35 to 45 volts
- 150°C junction temperature
- Reverse energy tested

Electrical Characteristics		
Average forward current	$I_F(AV)$ 240 Amps	$T_C = 92^\circ C$, square wave, $R_{\theta JC} = 0.24^\circ C/W$
Maximum surge current	I_{FSM} 3500 Amp	8.3 ms, half sine $T_J = 150^\circ C$
Max repetitive peak reverse current	$I_R(OV)$ 2 Amps	$f = 1$ KHz, $25^\circ C$, 1 μ sec square wave
Max peak forward voltage	V_{FM} 0.49 Volts	$I_{FM} = 240A; T_J = 125^\circ C^*$
Max peak forward voltage	V_{FM} 0.55 Volts	$I_{FM} = 240A; T_J = 25^\circ C^*$
Max peak reverse current	I_{RM} 3.0 A	$V_{RRM}, T_J = 125^\circ C^*$
Max peak reverse current	I_{RM} 12 mA	$V_{RRM}, T_J = 25^\circ C$
Typical junction capacitance	C_J 10500 pF	$V_R = 5.0V, T_J = 25^\circ C$

*Pulse test: Pulse width 300 μ sec, Duty cycle 2%

Thermal and Mechanical Characteristics		
Storage temp range	T_{STG}	$-55^\circ C$ to $175^\circ C$
Operating junction temp range	T_J	$-55^\circ C$ to $150^\circ C$
Maximum thermal resistance	$R_{\theta JC}$	$0.24^\circ C/W$ Junction to case
Typical thermal resistance (greased)	$R_{\theta CS}$	$0.12^\circ C/W$ Case to sink
Terminal torque		35–40 inch pounds
Mounting torque		20–25 inch pounds
Weight		1.1 ounces (28 grams)

HS24035 — HS24045

Figure 1
Typical Forward Characteristics

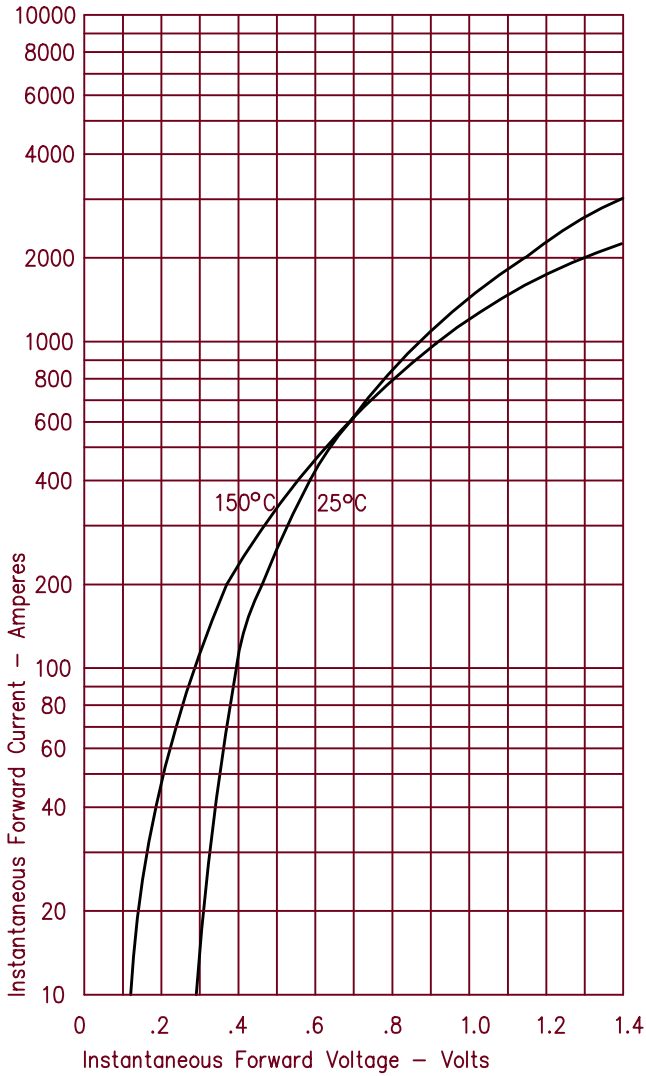


Figure 3
Typical Junction Capacitance

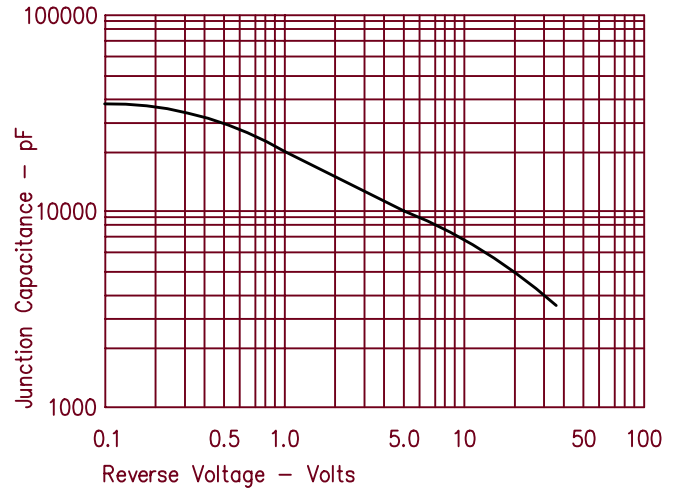


Figure 4
Forward Current Derating

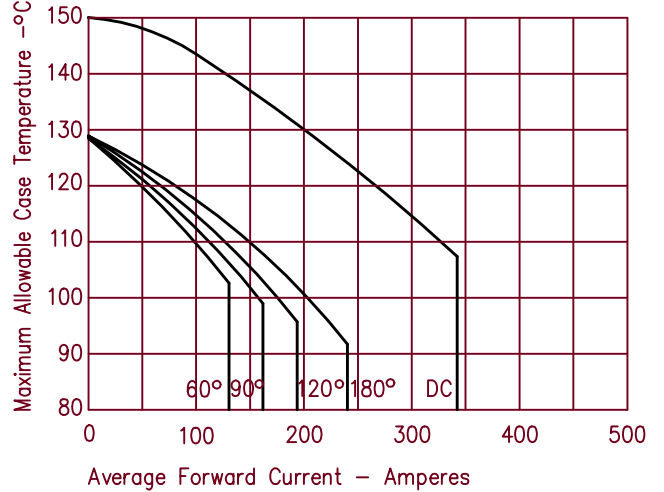


Figure 2
Typical Reverse Characteristics

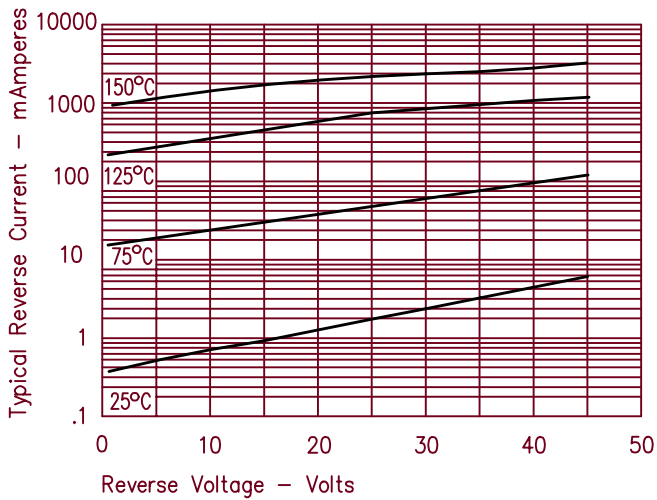
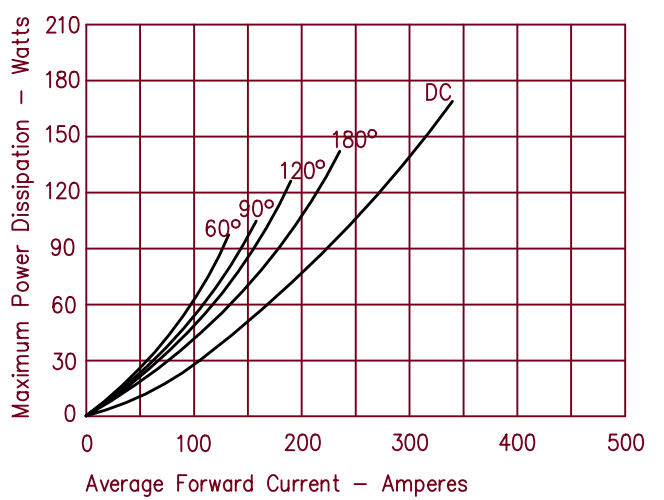


Figure 5
Maximum Forward Power Dissipation





LittleDiode supplies new, hard to find or obsolete electronic components and semiconductors all over the world.

With over two million different components listed you are sure to find the part you need.

Feel free to visit us today at our online store:

LittleDiode.com

Looking forward to providing you with the best possible service.