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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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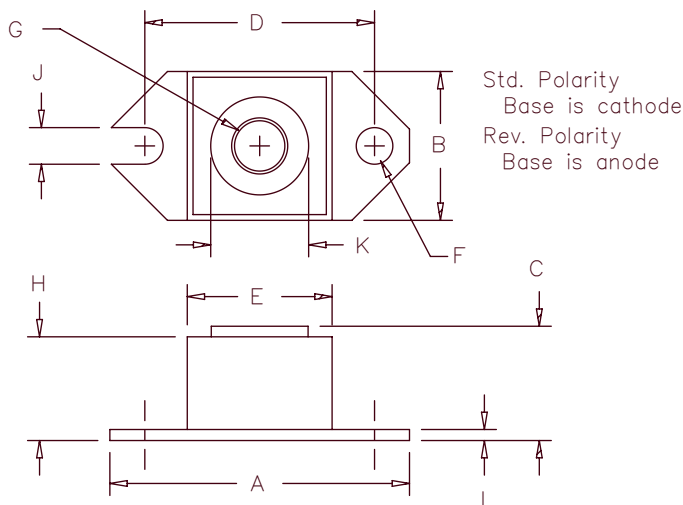
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# 240 Amp Schottky Rectifier

## HS24035 – HS24045



Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	1.52	1.56	38.61	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	.525	.580	13.34	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
- VRRM – 35 to 45 volts
- 150°C junction temperature
- Reverse energy tested
- ROHS Compliant

### Electrical Characteristics

Average forward current	$I_{(AV)}$ 240 Amps	$T_C = 92^\circ\text{C}$ , square wave, $R_{\theta JC} = 0.24^\circ\text{C/W}$
Maximum surge current	$I_{FSM}$ 3500 Amp	8.3 ms, half sine $T_J = 150^\circ\text{C}$
Max repetitive peak reverse current	$R(0V)$ 2 Amps	$f = 1\text{ KHz}$ , $25^\circ\text{C}$ , $1\mu\text{sec}$ square wave
Max peak forward voltage	$V_{FM}$ 0.49 Volts	$I_{FM} = 240\text{A}$ ; $T_J = 125^\circ\text{C}^*$
Max peak forward voltage	$V_{FM}$ 0.55 Volts	$I_{FM} = 240\text{A}$ ; $T_J = 25^\circ\text{C}^*$
Max peak reverse current	$R_M$ 3.0 A	$V_{RRM}$ , $T_J = 125^\circ\text{C}^*$
Max peak reverse current	$R_M$ 12 mA	$V_{RRM}$ , $T_J = 25^\circ\text{C}$
Typical junction capacitance	$C_j$ 10500 pF	$V_R = 5.0\text{V}$ , $T_J = 25^\circ\text{C}$

\*Pulse test: Pulse width  $300\mu\text{sec}$ , Duty cycle 2%

### Thermal and Mechanical Characteristics

Storage temp range	TSTG	$-55^\circ\text{C}$ to $175^\circ\text{C}$
Operating junction temp range	$T_J$	$-55^\circ\text{C}$ to $150^\circ\text{C}$
Maximum thermal resistance	$R_{\theta JC}$	$0.24^\circ\text{C/W}$ Junction to case
Typical thermal resistance (greased)	$R_{\theta CS}$	$0.12^\circ\text{C/W}$ 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

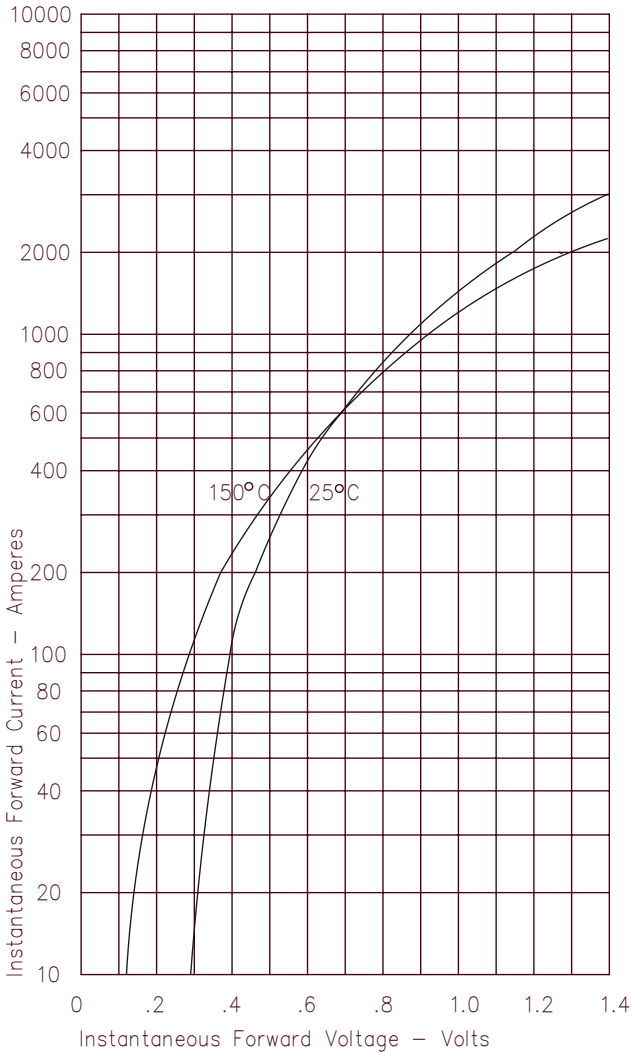


Figure 3  
Typical Junction Capacitance

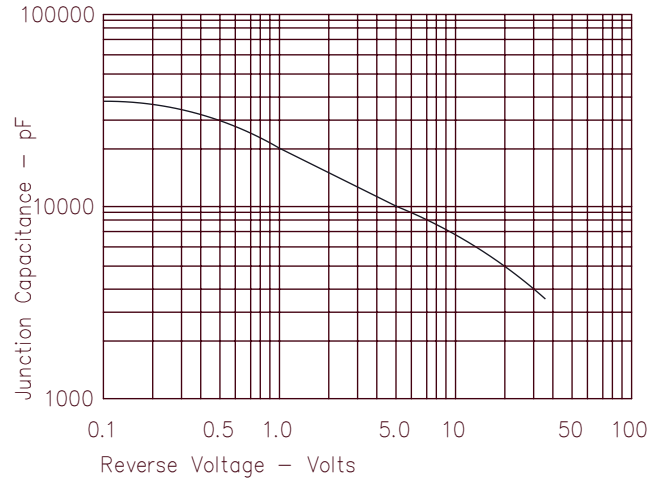


Figure 4  
Forward Current Derating

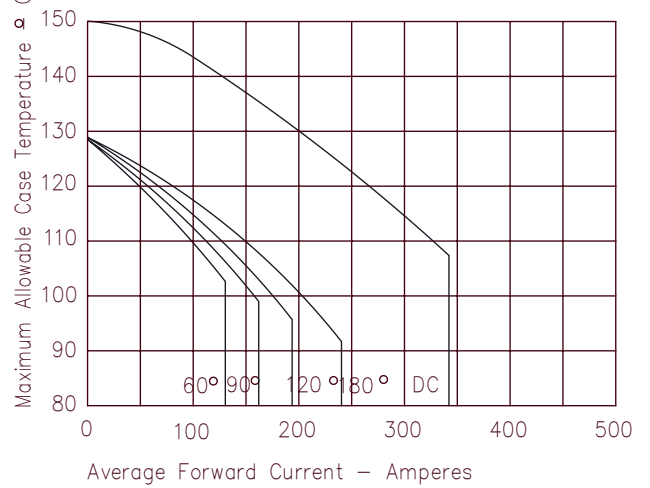


Figure 2  
Typical Reverse Characteristics

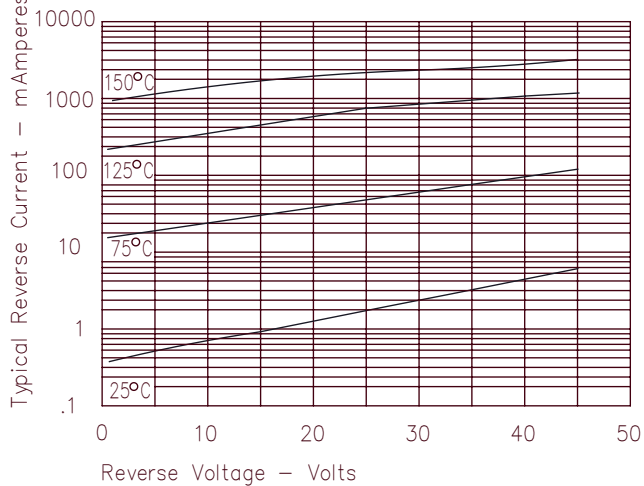
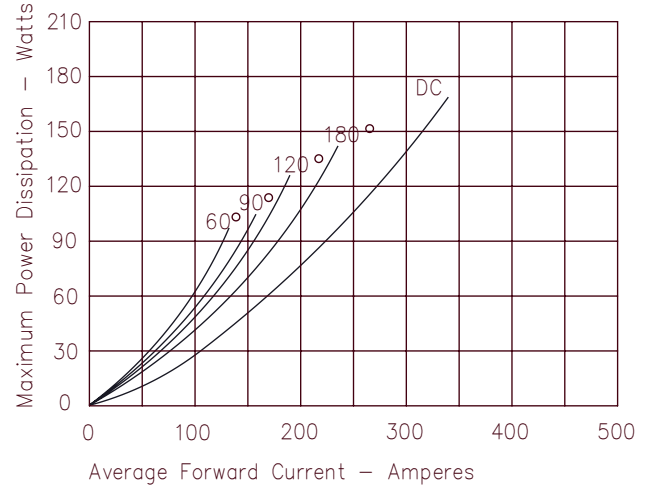


Figure 5  
Maximum Forward Power Dissipation



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