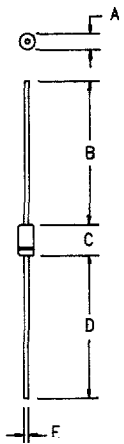




1 Amp Schottky Rectifier MSP140, MSP145, MSP150



Dim. Inches	Millimeter		Notes
	Minimum	Maximum	
A	---	.107	2.718 Dia.
B	1.10	---	27.940
C	---	.205	5.207
D	1.10	---	27.940
E	.030	.034	.762 .864

PLASTIC D041

Catalog Number	Working Peak Reverse Voltage V_{RWM}	Repetitive Peak Reverse Voltage V_{RRM}
MSP140	40V	40V
MSP145	45V	45V
MSP150	50V	50V

- Schottky Barrier Rectifier
- Guard Ring Protection
- Low Forward Voltage
- 1 Ampere/50 Volts
- 150°C Junction Temperature
- VRRM 40 to 50 Volts

Electrical Characteristics		
Average forward current	$I_F(AV)$ 1.0 Amps	$T_A = 120^\circ C$ Square wave, $R_{\theta JL} = 35^\circ C/W$, $L = 0$
Average forward current	$I_F(AV)$ 1.0 Amps	$T_A = 100^\circ C$ Square wave, $R_{\theta JL} = 60^\circ C/W$, $L = 3/8"$
Maximum surge current	I_{FSM} 75 Amps	8.3 ms, half sine, $T_J = 150^\circ C$
Max peak forward voltage	V_{FM} .39 Volts	$I_{FM} = 0.1A; T_J = 25^\circ C^*$
Max peak forward voltage	V_{FM} .58 Volts	$I_{FM} = 1.0A; T_J = 25^\circ C^*$
Max peak reverse current	I_{RM} 100 μA	$V_{RRM}, T_J = 25^\circ C$
Typical junction capacitance	C_J 60pF	$V_R = 5.0V, T_J = 25^\circ C$

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

Thermal and Mechanical Characteristics		
Storage temperature range	T_{STG}	$-65^\circ C$ to $+175^\circ C$
Operating junction temp range	T_J	$-65^\circ C$ to $+150^\circ C$
Maximum thermal resistance	$L = 3/8"$ $R_{\theta JL}$	$60^\circ C/W$
	$L = 0$ $R_{\theta JL}$	$35^\circ C/W$
Weight		0.38 grams typical

Junction to Lead
Junction to Lead

PH: 303-469-2161
FAX: 303-466-3775

Microsemi Corp.
Colorado

MSP140, MSP145, MSP150

Figure 1
Maximum Forward Characteristics

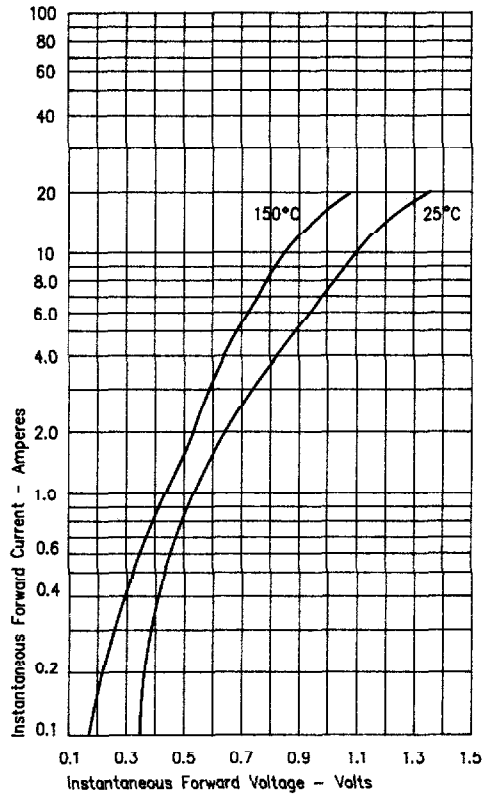


Figure 3
Typical Junction Capacitance

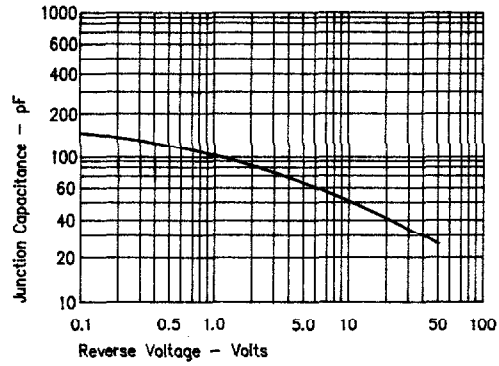


Figure 2
Typical Reverse Characteristics

