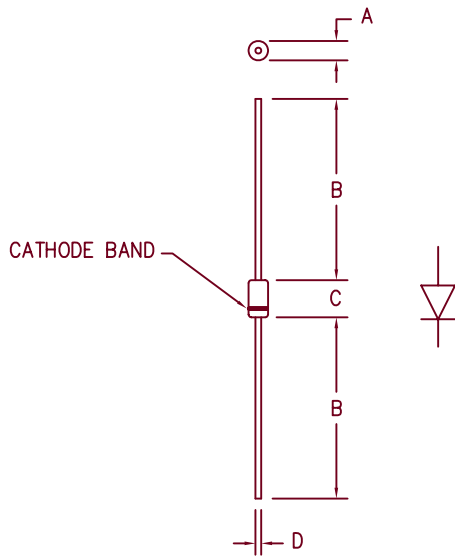


1 Amp Schottky Rectifier MSP140 — MSP150



Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	.081	.107	2.057	2.718	Dia.
B	1.10	---	27.94	---	
C	.160	.205	4.064	5.207	
D	.028	.034	.711	.864	Dia.

PLASTIC D041

Catalog Number	Working Peak Reverse Voltage V_{RWM}	Repetitive Peak Reverse Voltage V_{RRM}	• Schottky Barrier Rectifier • Guard Ring Protection • Low Forward Voltage • 150°C Junction Temperature • V_{RRM} 40 to 50 Volts
MSP140	40V	40V	
MSP145	45V	45V	
MSP150	50V	50V	

Electrical Characteristics		
Average forward current	I F(AV) 1.0 Amps	TA = 120°C Square wave, RθJL = 35°C/W, L = 0
Maximum surge current	I FSM 50 Amps	8.3 ms, half sine, TJ = 150°C
Max peak forward voltage	V FM .58 Volts	IFM = 1.0A: TJ = 25°C*
Max peak reverse current	IRM 100 μA	VRRM, TJ = 25°C
Typical junction capacitance	CJ 60pF	VR = 5.0V, TJ = 25°C
*Pulse test: Pulse width 300 μsec, Duty cycle 2%		

Thermal and Mechanical Characteristics			
Storage temperature range	T_{STG}	-55°C to $+175^\circ\text{C}$	
Operating junction temp range	T_J	-55°C to $+150^\circ\text{C}$	
Maximum thermal resistance $L = 1/4"$	$R_{\theta JL}$	15 $^\circ\text{C/W}$ Junction to Lead	
Weight		0.38 grams typical	



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

05-25-07 Rev. 2

MSP140 — MSP150

Figure 1
Maximum Forward Characteristics

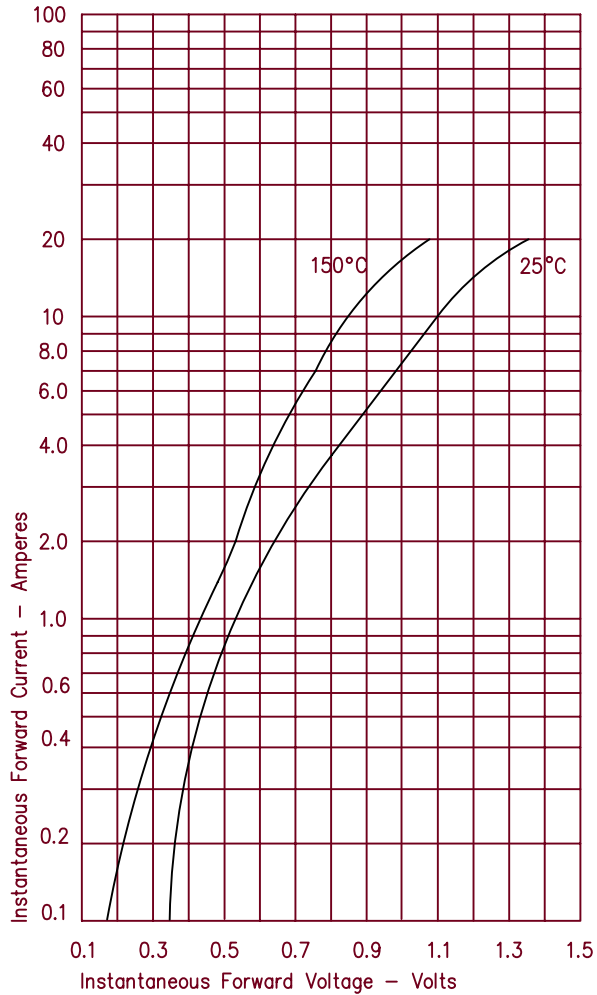


Figure 2
Typical Reverse Characteristics

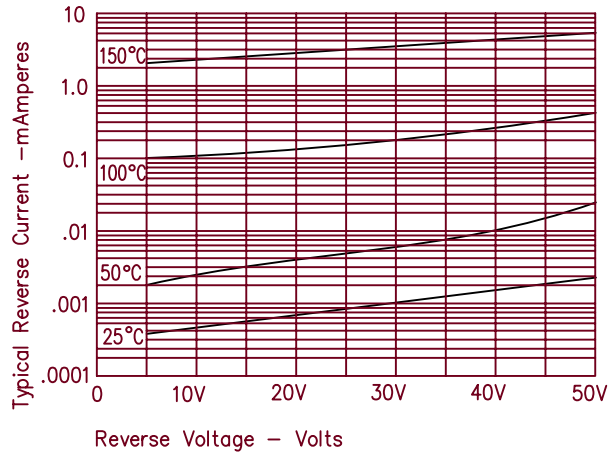


Figure 3
Typical Junction Capacitance

