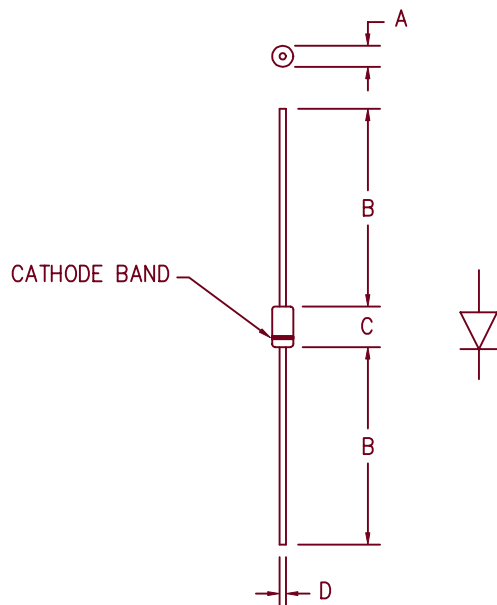


1 Amp Schottky Rectifier MSG140 — MSG150



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.

GLASS HERMETIC D041

Catalog Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage
	V_{RWM}	V_{RRM}
MSG140	40V	40V
MSG145	45V	45V
MSG150	50V	50V

- Schottky Barrier Rectifier
- Guard Ring Protection
- Low Forward Voltage
- 150°C Junction Temperature
- V_{RRM} 40 to 50 Volts

Electrical Characteristics

Average forward current	$I_F(AV)$ 1.0 Amps	$T_A = 120^\circ C$ Square wave
Maximum surge current	I_{FSM} 50 Amps	8.3 ms, half sine, $T_J = 150^\circ C$
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 $L = 1/4"$	$R_{\theta JL}$	15°C/W Junction to Lead
Weight		0.38 grams typical

4-14-00 Rev. 1

MSG140 — MSG150

Figure 1
Maximum Forward Characteristics

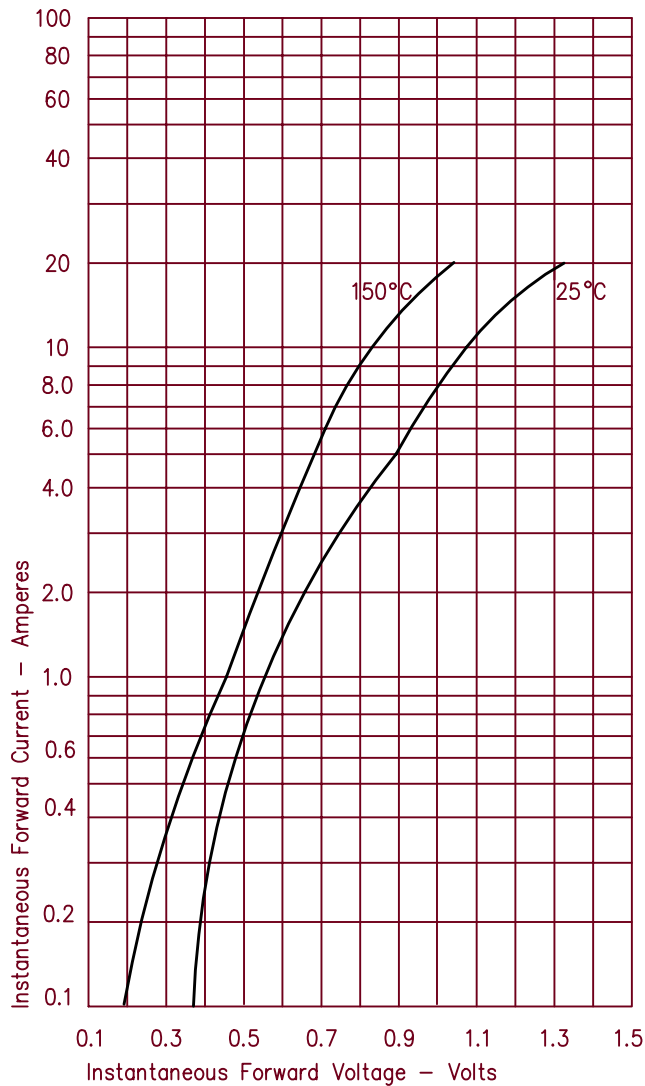


Figure 3
Typical Junction Capacitance

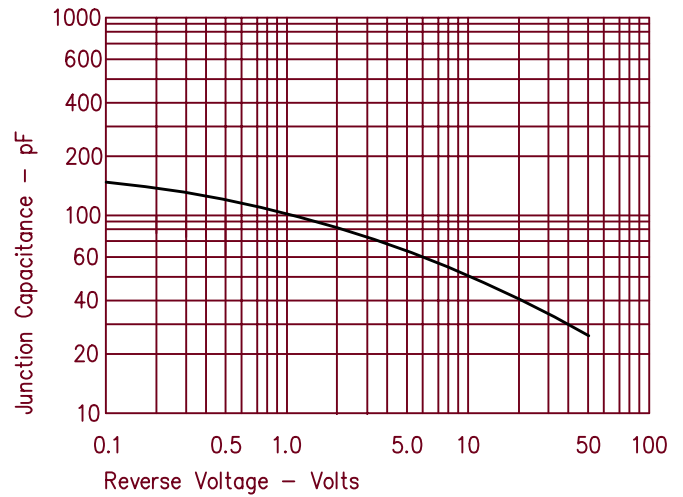


Figure 2
Typical Reverse Characteristics

