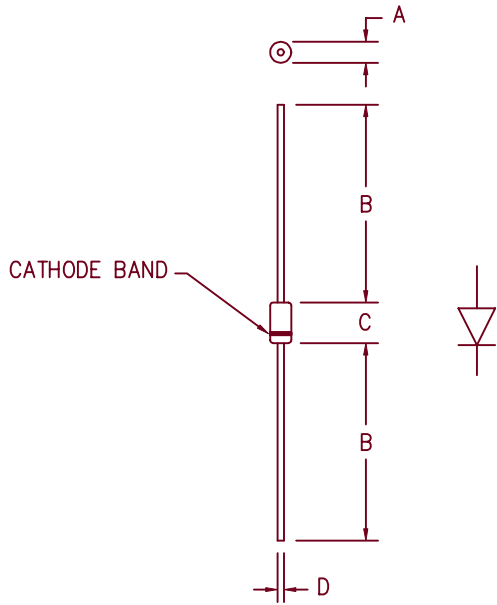


# 1 Amp Schottky Rectifier MSG140 — MSG150



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 $V_{RWM}$	Repetitive Peak Reverse Voltage $V_{RRM}$
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 $\mu A$	$V_{RRM}, T_J = 25^\circ C$
Typical junction capacitance	$C_J$ 60pF	$V_R = 5.0V, T_J = 25^\circ C$

\*Pulse test: Pulse width 300  $\mu sec$ , 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	$R_{\theta JL}$ L = 1/4"	15°C/W Junction to Lead
Weight		0.38 grams typical

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# MSG140 — MSG150

Figure 1  
Maximum Forward Characteristics

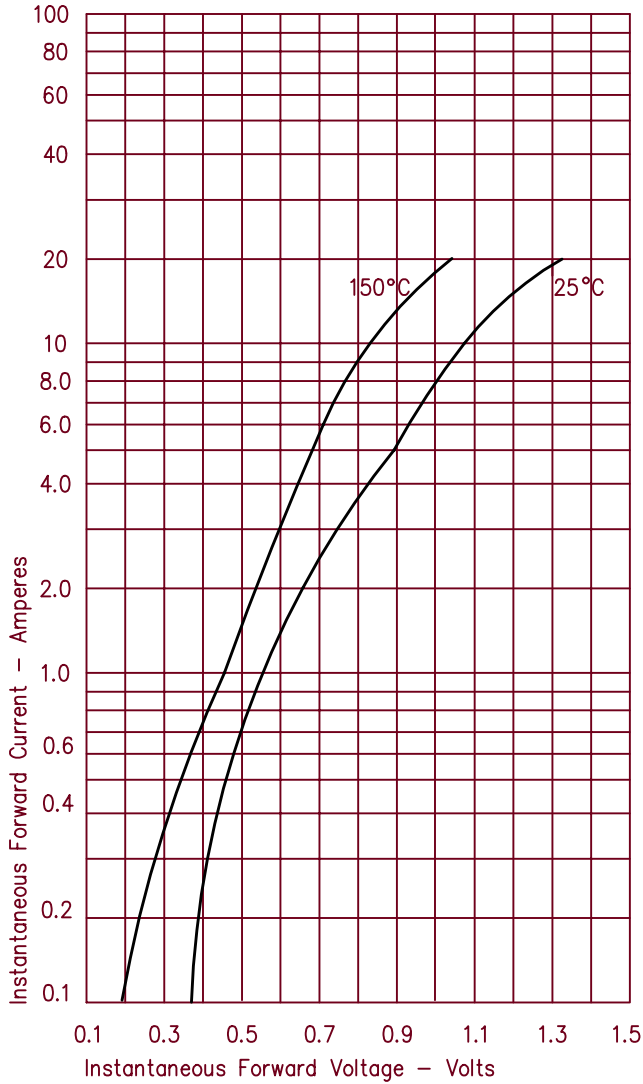


Figure 3  
Typical Junction Capacitance

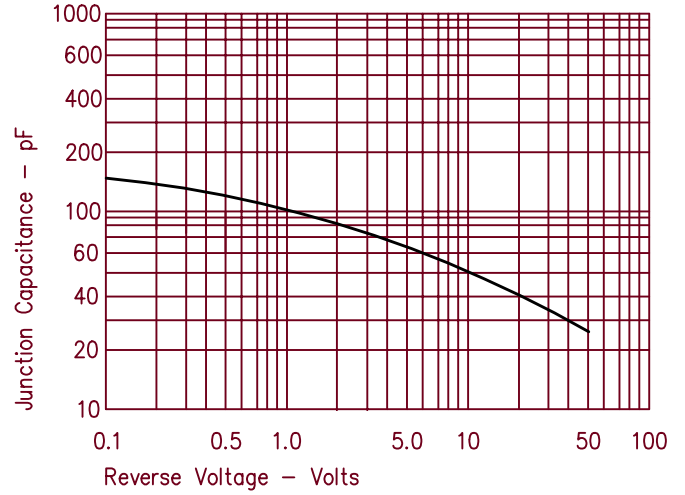


Figure 2  
Typical Reverse Characteristics

