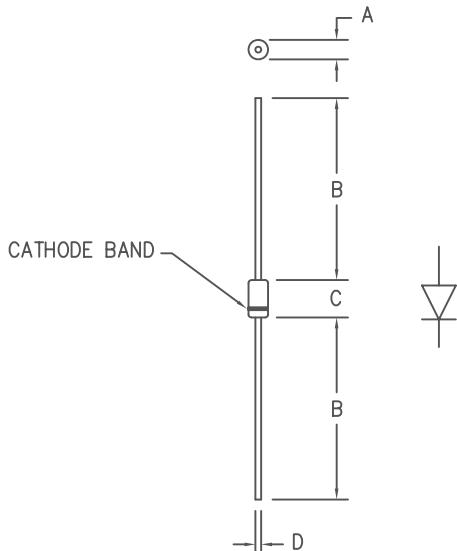


# 1 Amp Schottky Rectifier

## MS104 — MS106



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 DO41

Microsemi Catalog Number	Industry Part Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage
MS104		40V	40V
MS105	MBR150	50V	50V
MS106	MBR160 SR106	60V	60V

- Schottky Barrier Rectifier
- Guard Ring Protection
- 175°C Junction Temperature
- V<sub>RRM</sub> 40 to 60 Volts

### Electrical Characteristics

Average forward current  
Maximum surge current  
Max peak forward voltage  
Max peak reverse current  
Typical junction capacitance

I<sub>F(AV)</sub> 1.0 Amps  
I<sub>FSM</sub> 50 Amps  
V<sub>F</sub> .69 Volts  
I<sub>RM</sub> 100  $\mu$ A  
C<sub>J</sub> 53pF

T<sub>L</sub> = 123°C Square wave, R<sub>θJL</sub> = 25°C/W, L = 1/4"  
8.3ms, half sine, T<sub>J</sub> = 175°C  
I<sub>FM</sub> = 1.0A: T<sub>J</sub> = 25°C\*  
V<sub>RRM,TJ</sub> = 25°C  
V<sub>R</sub> = 5.0V, T<sub>J</sub> = 25°C

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

### Thermal and Mechanical

Storage temperature range  
Operating junction temp range  
Maximum thermal resistance  
Weight

T<sub>STG</sub>  
T<sub>J</sub>  
L = 1/4" R<sub>θJL</sub>

-55°C to 175°C  
-55°C to 175°C  
25°C/W Junction to Lead  
.011 ounces (0.34 grams) typical



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05-17-07 Rev. 4

# MS104 – MS106

Figure 1  
Typical Forward Characteristics

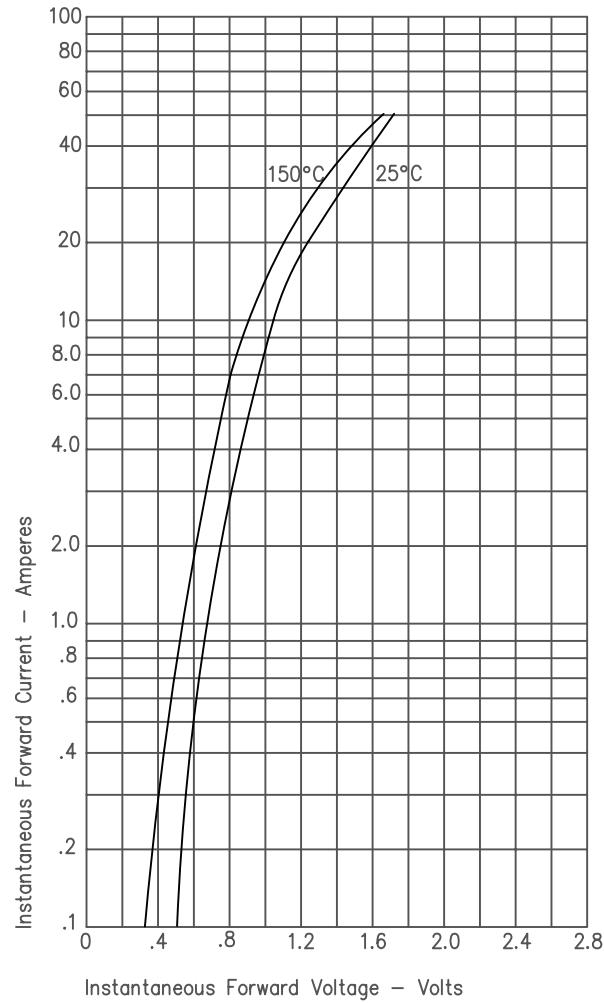


Figure 3  
Typical Junction Capacitance

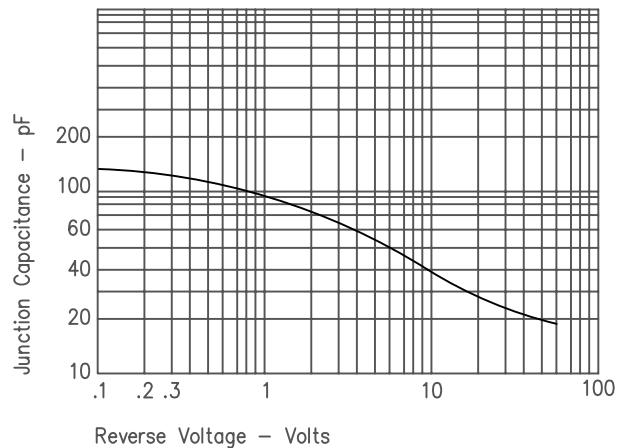


Figure 2  
Typical Reverse Characteristics

