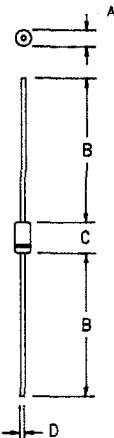


# 5 Amp Schottky Rectifier MS504, MS505

C



Dim.	Inches		Millimeter		
	Minimum	Maximum	Minimum	Maximum	Notes
A	.188	.260	4.78	6.50	Diag.
B	1.00	---	25.4	---	
C	.285	.375	7.24	9.52	
D	.046	.056	1.17	1.42	Diag.

## PLASTIC D0201AD

Microsemi  
Catalog Number

Working  
Peak Reverse  
Voltage

Repetitive  
Peak Reverse  
Voltage

MS504  
MS505

40V  
50V

40V  
50V

- Schottky Barrier Rectifier
- Guard Ring Protection
- 175°C Junction Temperature
- High Current Capability

### Electrical Characteristics

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

I F(AV) 5.0 Amps  
I F(AV) 5.0 Amps  
I FSM 300 Amps  
VFM .51 Volts  
VFM .62 Volts  
IRM 250  $\mu$ A  
CJ 415pF

TA = 142°C Square wave, R<sub>θJL</sub> = 11°C/W, L = 1/8"  
TA = 131°C Square wave, R<sub>θJL</sub> = 14.7°C/W, L = 3/8"  
8.3ms, half sine, TJ = 175°C  
IFM = 1.0A; TJ = 25°C \*  
IFM = 5.0A; TJ = 25°C \*  
V<sub>RRM</sub>, TJ = 25°C  
VR = 5.0V, IJ = 25°C

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

### Thermal and Mechanical Characteristics

Storage temperature range  
Operating junction temp range  
Maximum thermal resistance  
Weight

T<sub>STG</sub>  
T<sub>J</sub>  
L = 3/8" R<sub>θJL</sub>  
L = 1/8" R<sub>θJL</sub>

-40°C to 175°C  
-40°C to 175°C  
14.7°C/W  
11°C/W  
Junction to Lead  
Junction to Lead  
.032 ounces (1.0 grams) typical

# MS504, MS505

Figure 1  
Typical Forward Characteristics

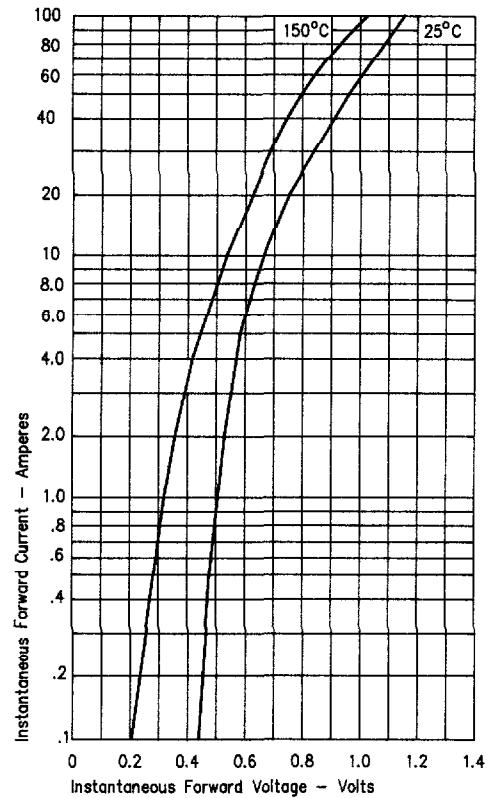


Figure 3  
Typical Junction Capacitance

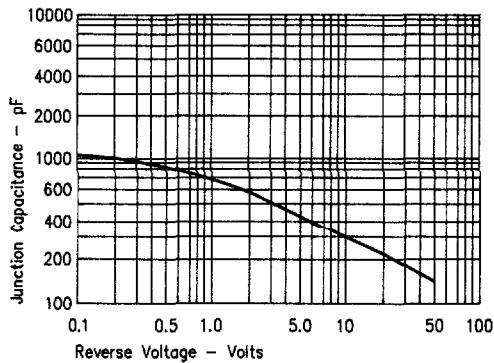


Figure 2  
Typical Reverse Characteristics

