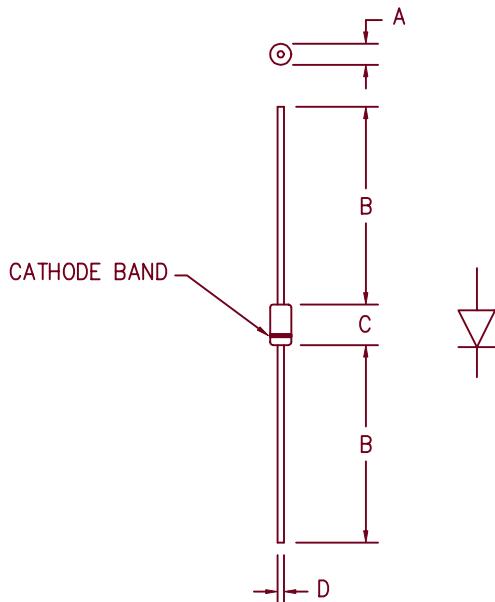


# 3 Amp Schottky Rectifier MS304 — MS306



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

PLASTIC D0201AD

Microsemi Catalog Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage
MS304	40V	40V
MS305	50V	50V
MS306	60V	60V

- Schottky Barrier Rectifier
- Guard Ring Protection
- 175°C Junction Temperature
- $V_{RRM}$  40 to 60 Volts

## Electrical Characteristics

Average forward current	$I_F(AV)$ 3.0 Amps	$T_A = 115^\circ\text{C}$ Square wave, $R_{\theta JL} = 52^\circ\text{C}/W$ , $L = 3/8"$
Maximum surge current	$I_{FSM}$ 150 Amps	8.3ms, half sine, $T_J = 175^\circ\text{C}$
Max peak forward voltage	$V_{FM}$ .62 Volts	$I_{FM} = 3.0A$ ; $T_J = 25^\circ\text{C}$ *
Max peak reverse current	$I_{RM}$ 100 $\mu\text{A}$	$V_{RRM}, T_J = 25^\circ\text{C}$
Typical junction capacitance	$C_J$ 215 pF	$V_R = 5.0V, T_J = 25^\circ\text{C}$

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

## Thermal and Mechanical Characteristics

Storage temperature range	$T_{STG}$	-55°C to 175°C
Operating junction temp range	$T_J$	-55°C to 175°C
Maximum thermal resistance	$R_{\theta JC}$	28°C/W Junction to case
Weight	$L = 0"$ $R_{\theta JL}$ $L = 3/8"$ $R_{\theta JL}$	52°C/W Junction to lead .032 ounces (1.0 grams) typical

# MS304 - MS306

Figure 1  
Typical Forward Characteristics

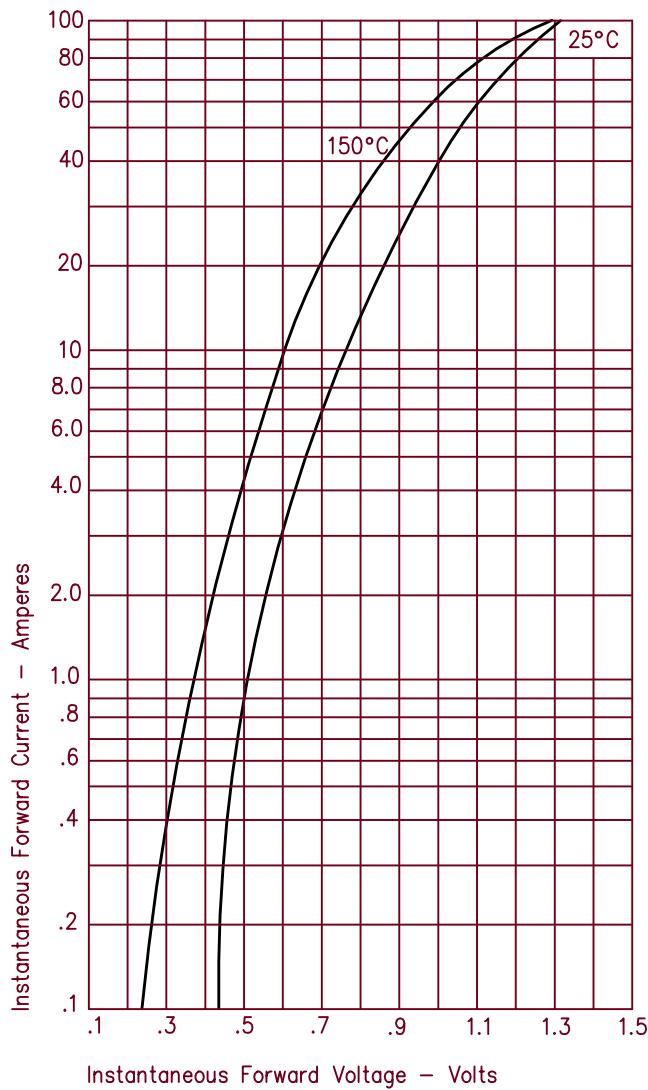


Figure 2  
Typical Reverse Characteristics

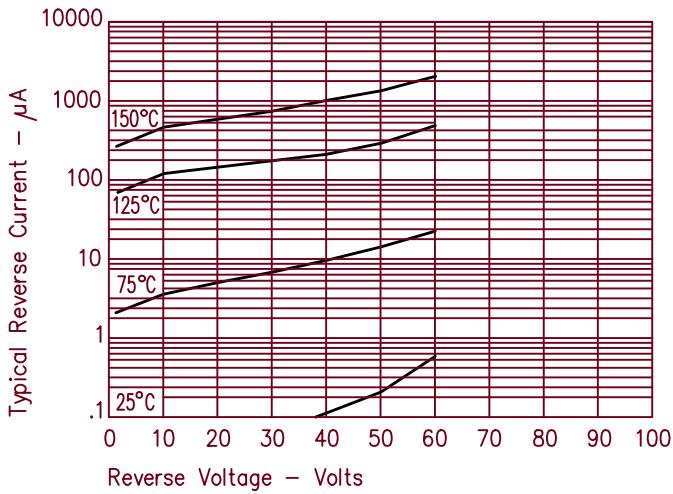


Figure 3  
Typical Junction Capacitance

