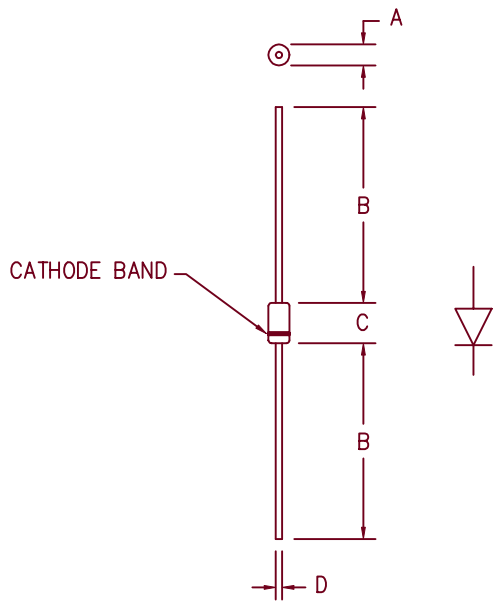


# 3 Amp Schottky Rectifier MS308 — MS310



Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
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	Industry Part Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage
MS308	SR308	80V	80V
MS309		90V	90V
MS310	MBR3100 SR3010	100V	100V

- Schottky Barrier Rectifier
- Guard Ring Protection
- 175°C Junction Temperature
- $V_{RRM}$  80 to 100 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	$V_{FM}$ .81 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	$C_J$ 190 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	$T_{STG}$	$-55^\circ\text{C}$ to $175^\circ\text{C}$
Operating junction temp range	$T_J$	$-55^\circ\text{C}$ to $175^\circ\text{C}$
Maximum thermal resistance	$L = 0"$ $R_{\theta JC}$	$28^\circ\text{C/W}$ Junction to case
	$L = 3/8"$ $R_{\theta JL}$	$52^\circ\text{C/W}$ Junction to Lead
Weight		.032 ounces (1.0 grams) typical

# MS308 — MS310

Figure 1  
Typical Forward Characteristics

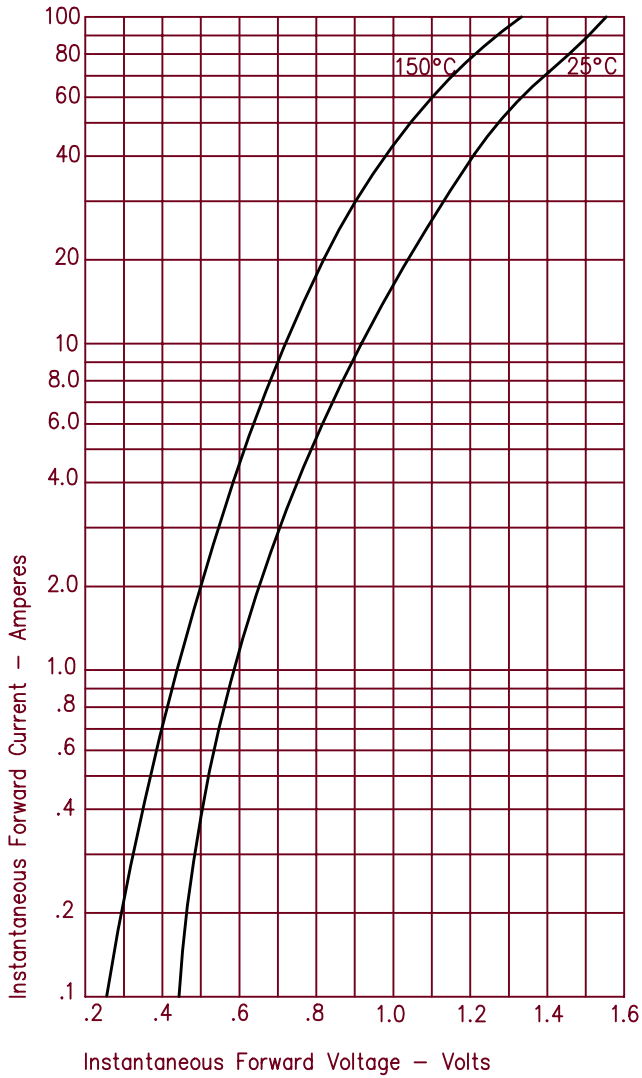


Figure 3  
Typical Junction Capacitance

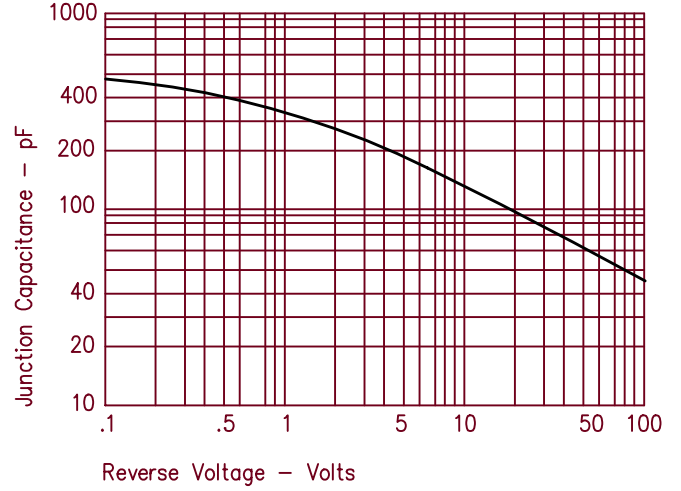


Figure 2  
Typical Reverse Characteristics

