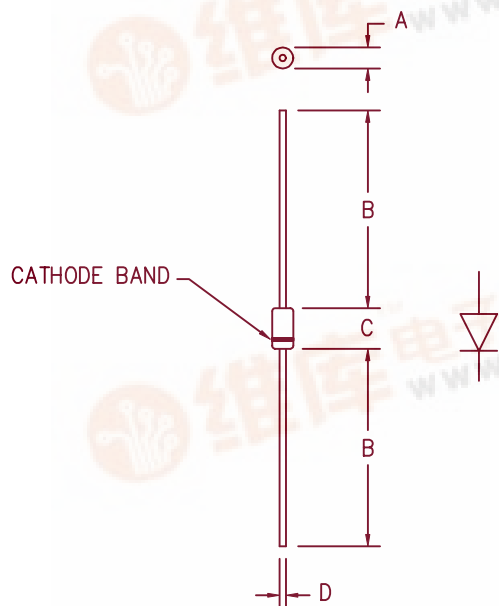


5 Amp Schottky Rectifier MS504, MS505



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

MS504
MS505

Working
Peak Reverse
Voltage

40V
50V

Repetitive
Peak Reverse
Voltage

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
 V_{FM} .51 Volts
 V_{FM} .62 Volts
 I_{RM} 250 μA
 C_J 415pF

$T_A = 142^\circ C$ Square wave, $R_{\theta JL} = 11^\circ C/W$, $L = 1/8"$
 $T_A = 131^\circ C$ Square wave, $R_{\theta JL} = 14.7^\circ C/W$, $L = 3/8"$
8.3ms, half sine, $T_J = 175^\circ C$
 $I_{FM} = 1.0A$: $T_J = 25^\circ C$ *
 $I_{FM} = 5.0A$: $T_J = 25^\circ C$ *
 V_{RRM} , $T_J = 25^\circ C$
 $V_R = 5.0V$, $T_J = 25^\circ C$

*Pulse test: Pulse width 300 μsec , Duty cycle 2%

Thermal and Mechanical Characteristics

Storage temperature range
Operating junction temp range
Maximum thermal resistance

T_{STG}
 T_J
 $L = 3/8"$ $R_{\theta JL}$
 $L = 1/8"$ $R_{\theta JL}$

$-55^\circ C$ to $175^\circ C$
 $-55^\circ C$ to $175^\circ C$
 $14.7^\circ C/W$ Junction to lead
 $11^\circ C/W$ Junction to lead
.032 ounces (1.0 grams) typical

Weight

MS504, MS505

Figure 1
Typical Forward Characteristics

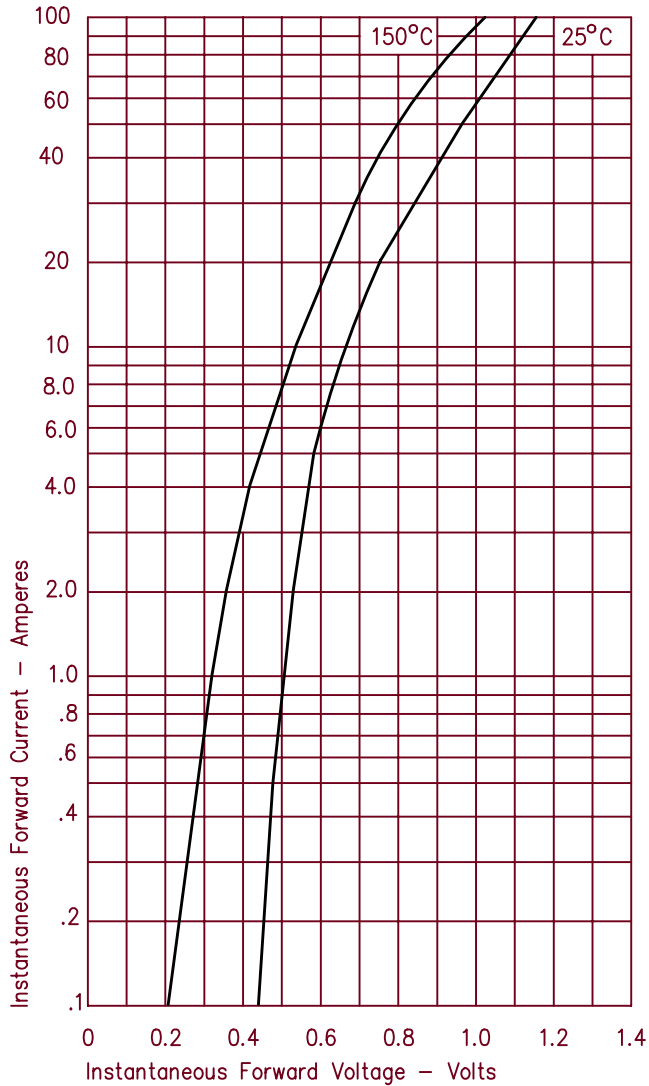


Figure 3
Typical Junction Capacitance

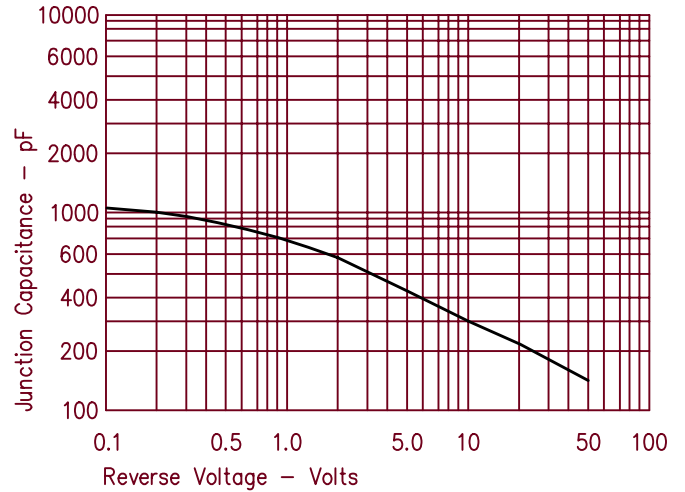


Figure 2
Typical Reverse Characteristics

