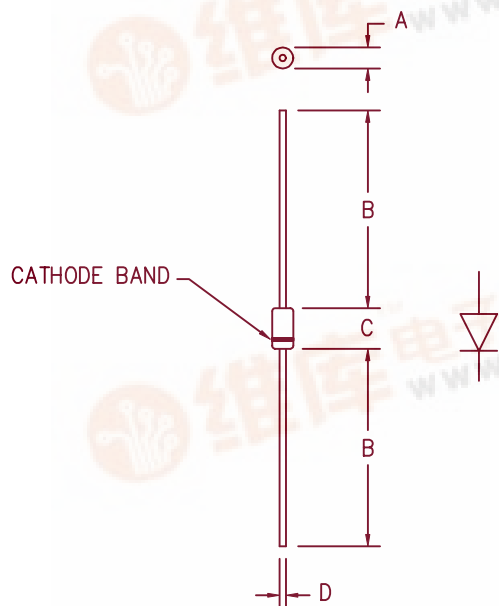


5 Amp Schottky Rectifier MS502, MS503



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

MS502
MS503

Working
Peak Reverse
Voltage

20V
30V

Repetitive
Peak Reverse
Voltage

20V
30V

- Schottky Barrier Rectifier
- Guard Ring Protection
- 150°C Junction Temperature
- VRRM 20 to 30V

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} .40 Volts
V_{FM} .49 Volts
I_{RM} 250 μ A
C_J 430 pF

T_A = 123°C, Square wave, R _{θ JL} = 11°C/W, L = 1/8"
T_A = 113°C, Square wave, R _{θ JL} = 14.7°C/W, L = 3/8"
8.3ms, half sine, T_J = 150°C
I_{FM} = 1.0A: T_J = 25°C *
I_{FM} = 5.0A: T_J = 25°C *
V_{RRM}, T_J = 25°C
V_R = 5.0V, T_J = 25°C

*Pulse test: Pulse width 300 μ sec, 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 _{θ JL}
L = 1/8" R _{θ JL}

-55°C to 175°C
-55°C to 150°C
14.7°C/W Junction to lead
11°C/W Junction to lead
.032 ounces (1.0 grams) typical

Weight

MS502, MS503

Figure 1
Typical Forward Characteristics

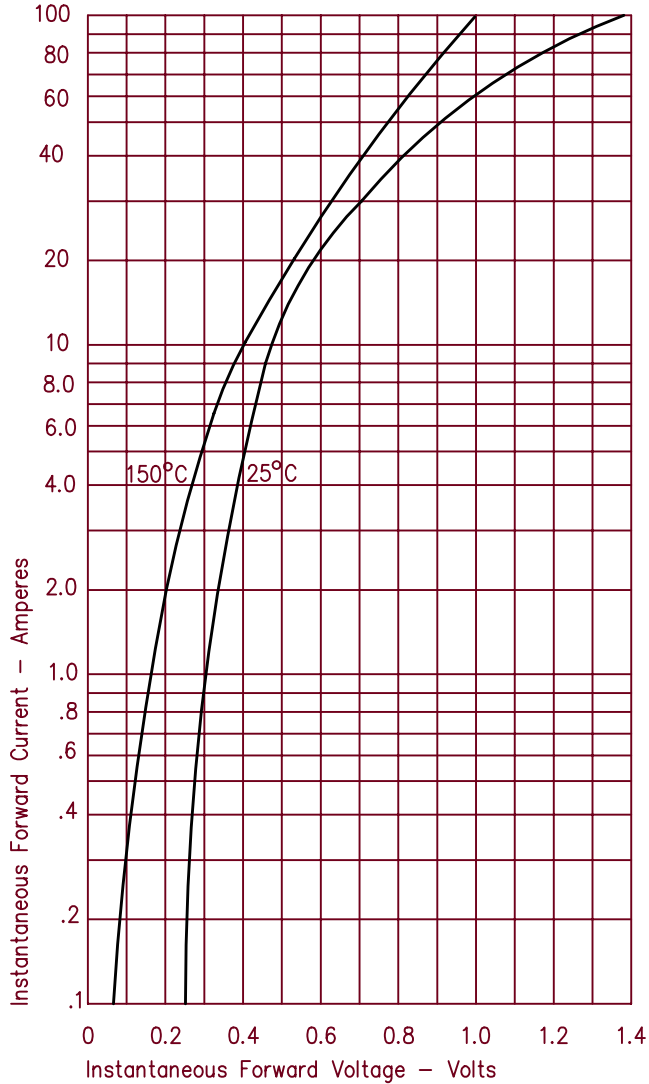


Figure 3
Typical Junction Capacitance

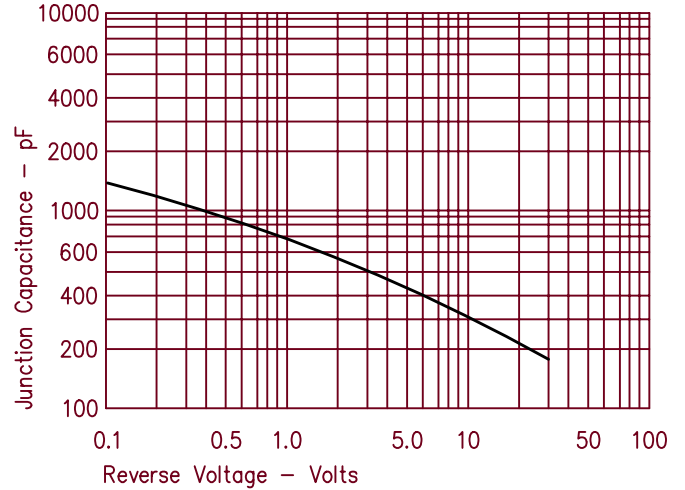


Figure 2
Typical Reverse Characteristics

