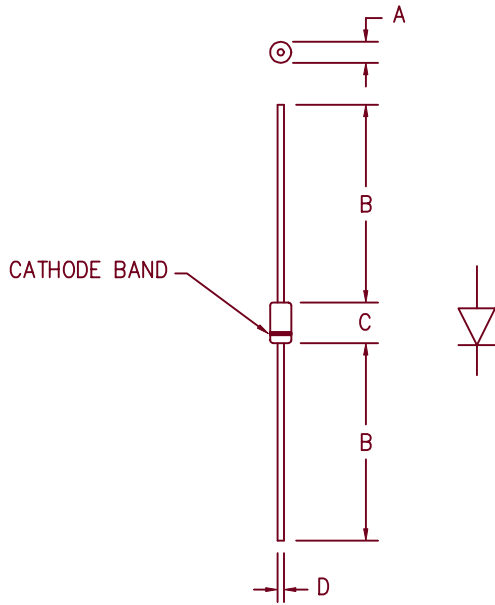


5 Amp Schottky Rectifier MS506



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	Dia.
D	.046	.056	1.17	1.42	

PLASTIC D0201AD

Microsemi Catalog Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage	• Schottky Barrier Rectifier • Guard Ring Protection • 175°C Junction Temperature • High Current Capability
MS506	60V	60V	

Electrical Characteristics

Average forward current	I _{F(AV)} 5.0 Amps	T _A = 139°C, Square wave, R _{θJL} = 11°C/W, L = 1/8"
Average forward current	I _{F(AV)} 5.0 Amps	T _A = 127°C, Square wave, R _{θJL} = 14.7°C/W, L = 3/8"
Maximum surge current	I _{FSM} 300 Amps	8.3ms, half sine, T _J = 175°C
Max peak forward voltage	V _{FM} .52 Volts	I _{FM} = 1.0A: T _J = 25°C *
Max peak forward voltage	V _{FM} .65 Volts	I _{FM} = 5.0A: T _J = 25°C *
Max peak reverse current	I _{RM} 250 μA	V _{RRM} , T _J = 25°C
Typical junction capacitance	C _J 355 pF	V _R = 5.0V, T _J = 25°C

*Pulse test: Pulse width 300 μsec, 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	L = 3/8" R _{θJL}	14.7°C/W	Junction to Lead
	L = 1/8" R _{θJL}	11°C/W	Junction to Lead
Weight		.032 ounces (1.0 grams) typical	

MS506

Figure 1
Typical Forward Characteristics

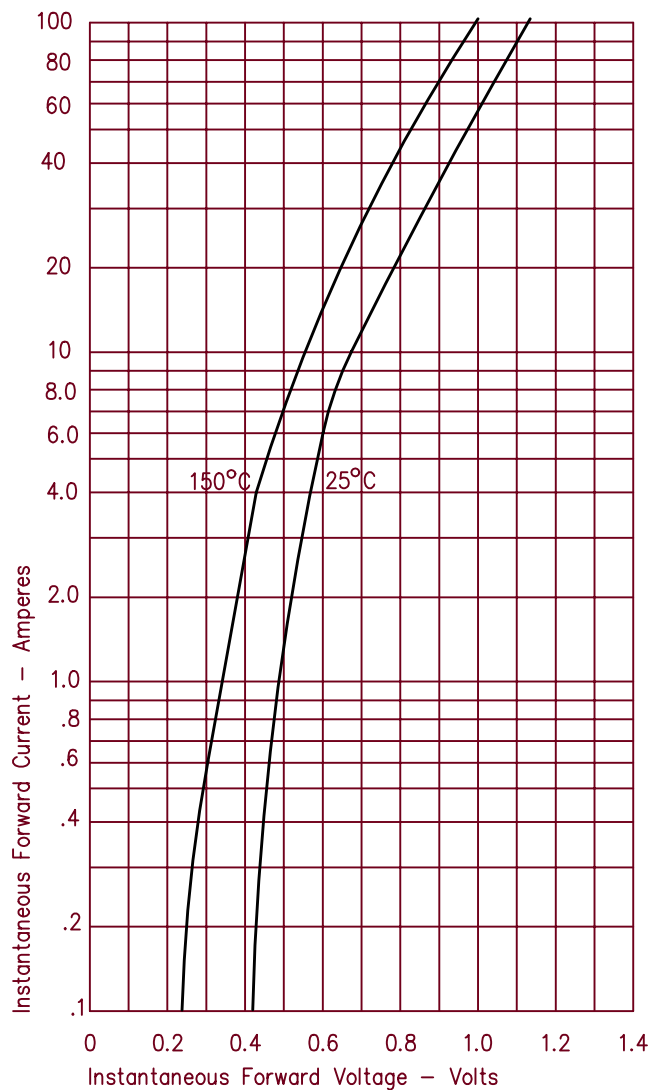


Figure 3
Typical Junction Capacitance

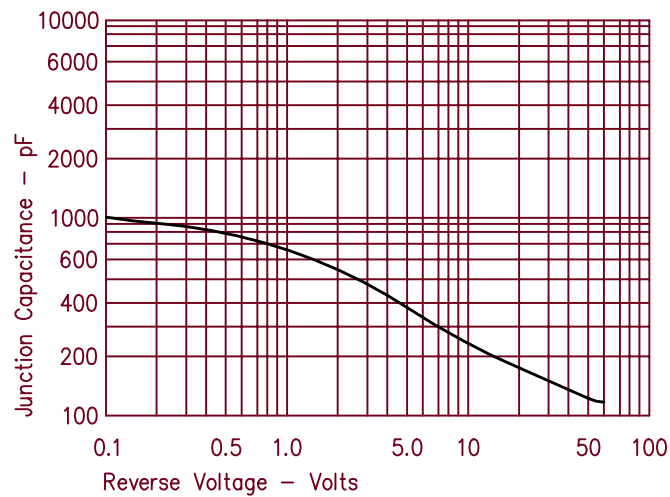


Figure 2
Typical Reverse Characteristics

