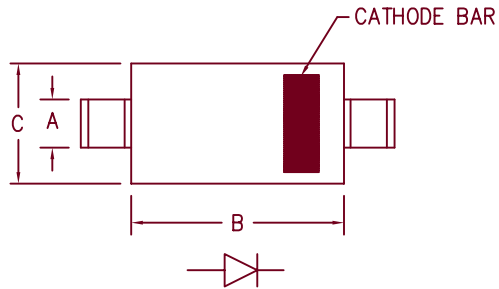
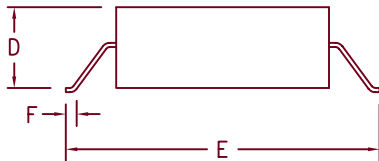


1 AMP FAST RECOVERY RECTIFIER MFS112 — MFS116



Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	.081	.087	2.06	2.21	
B	.160	.180	4.06	4.57	
C	.130	.155	3.30	3.94	
D	.075	.095	1.90	2.41	
E	.270	.290	6.86	7.37	
F	.015	.030	.381	.762	



Microsemi Catalog Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage
MFS112	1200V	1200V
MFS114	1400V	1400V
MFS116	1600V	1600V

- Fast Recovery Rectifier
- Surface Mount Package
- VRRM 1200 to 1600 Volts
- t_{RR} 500nS Max.
- 175° C Junction Temperature

Electrical Characteristics

Average forward current	I _{F(AV)} 1.0 Amps	T _L = 102°C, Square wave, R _{θJL} = 20°C/W
Maximum surge current	I _{FSM} 25 Amps	8.3ms, half sine, T _J = 175°C
Max peak forward voltage	V _{FM} 1.6 Volts	I _{FM} = 1A; T _J = 25°C *
Typ peak Reverse Current	I _{RM} 600uA	VRRM, T _J = 125°C
Max peak reverse current	I _{RM} 5uA	VRRM, T _J = 25°C
Max reverse recovery time	t _{RR} 500 ns	1/2A, 1A, 1/4A, T _J = 25°C
Typical junction capacitance	C _J 6.5 pF	T _J = 25° C, V _R = 10°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	R _{θJL}	20°C/W Junction to lead
Weight		.0047 ounces (.013 grams) typical



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04-18-07 Rev. 4

MFS112 – MFS116

Figure 1
Typical Forward Characteristics

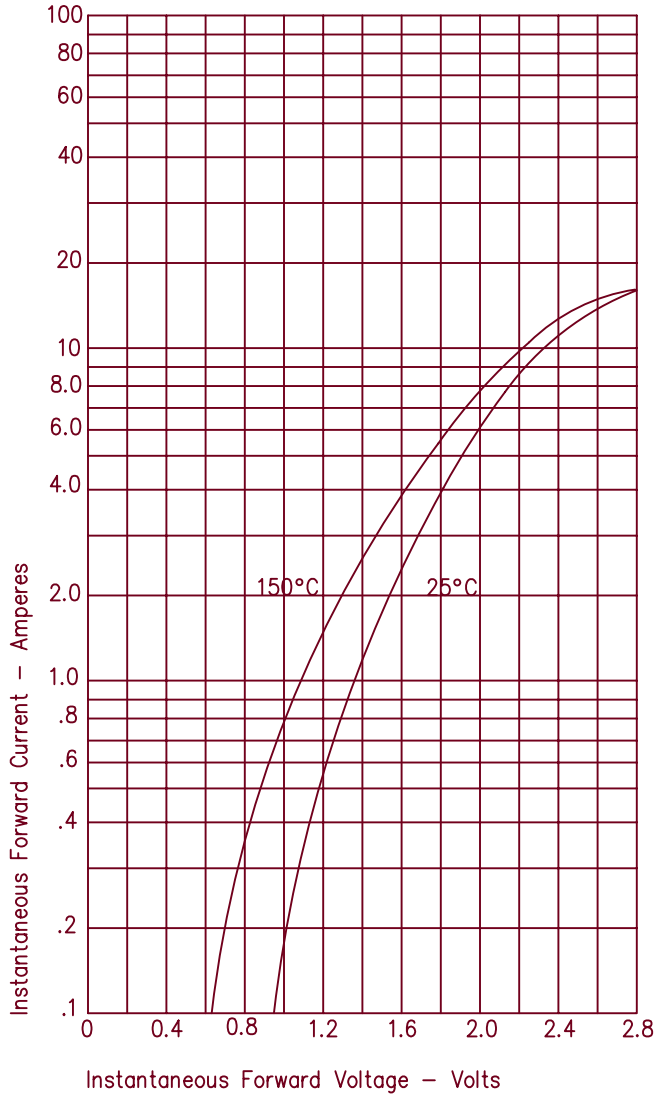


Figure 3
Typical Junction Capacitance

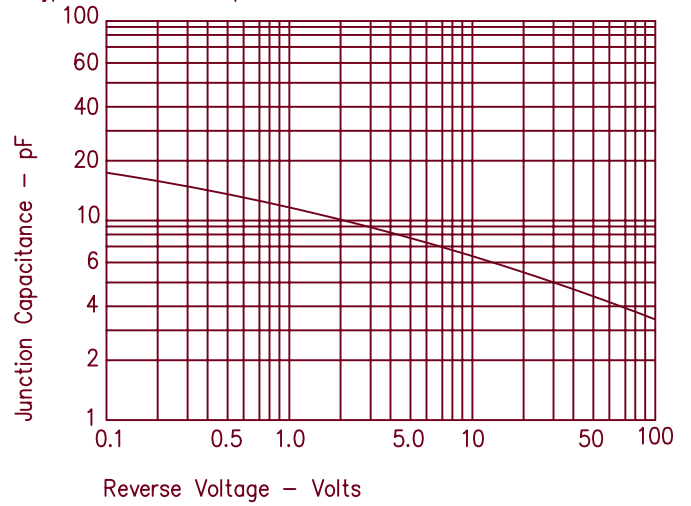


Figure 2
Typical Reverse Characteristics

