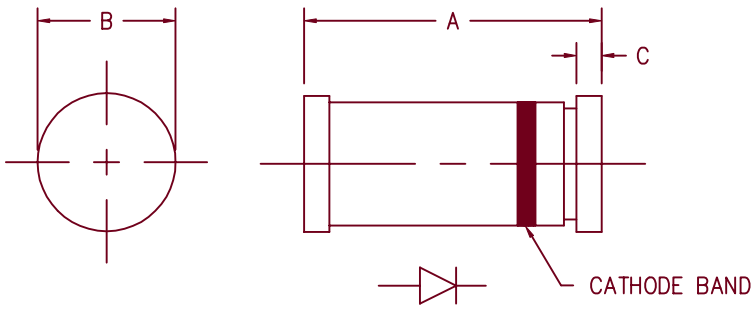
Ultra Fast Recovery Rectifier

UF110SM – UF120SM



Dim.	Inches		Millimeter		
	Minimum	Maximum	Minimum	Maximum	Notes
A	.189	.205	4.80	5.20	
B	.094	.105	2.39	2.66	Dia.
C	.016	.022	.41	.55	

GLASS HERMETIC DO213AB

Microsemi Catalog Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage
UF110SM	100V	100V
UF115SM	150V	150V
UF120SM	200V	200V

- Ultra fast recovery
- 175°C junction temperature
- V_{RRM} 100 to 200 volts
- 1 Amp current rating
- t_{RR} 30nS max

Electrical Characteristics

Average forward current	$I_{F(AV)}$ 1.0 Amps	T_A = 130°C Square wave, $R_{\theta JEC}$ = 45°C/W
Maximum surge current	I_{FSM} 25 Amps	8.3 ms, half sine, T_J = 175°C
Max peak forward voltage	V_{FM} 1.0 Volts	I_{FM} = 1.0A; T_J = 25°C*
Max reverse recovery time	t_{RR} 30 nS	1/2A, 1A, 1/4A, T_J = 25°C
Max peak reverse current	I_{RM} 5 µA	V_{RRM}, T_J = 25°C
Typical junction capacitance	C_J 7 pF	V_R = 10V, T_J = 25°C

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

Thermal and Mechanical Characteristics

Storage temperature range	T_{STG}	−65°C to 175°C
Operating junction temp range	T_J	−65°C to 175°C
Maximum thermal resistance	$R_{\theta JEC}$	45°C/W Junction to end cap
Weight		.004 ounces (0.012 grams) typical

6-8-00 Rev. 1

COLORADO Microsemi
800 Hoyt Street
Broomfield, CO. 80020
PH: (303) 469-2161
FAX: (303) 466-3775
www.microsemi.com

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Figure 1
Maximum Forward Characteristics

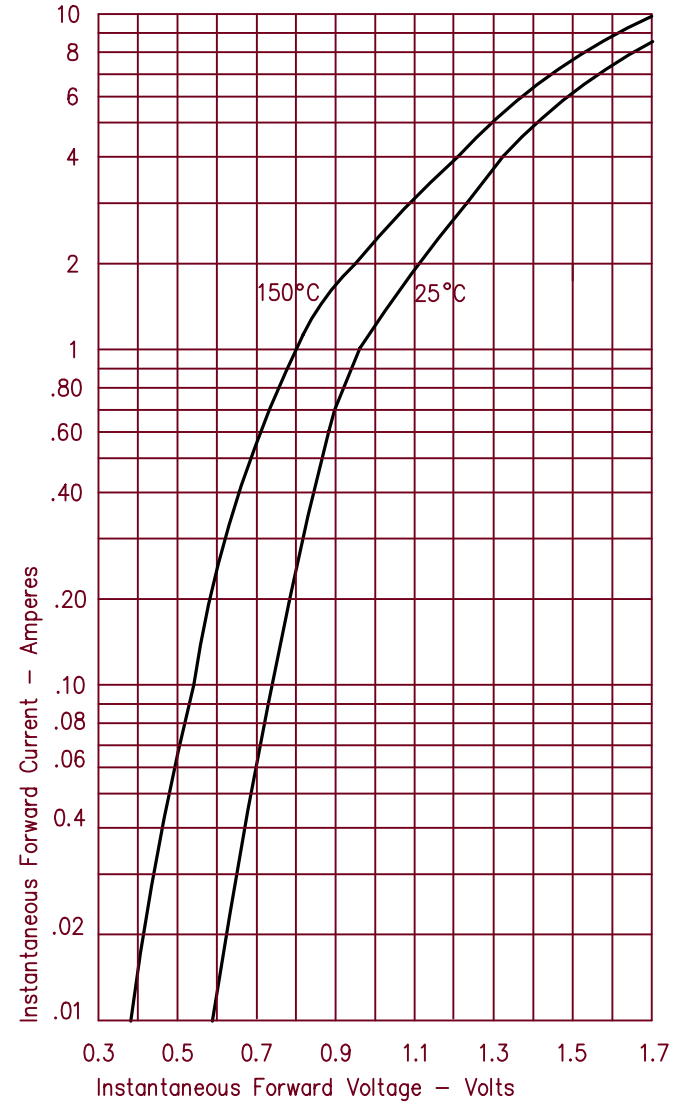

Figure 2
Typical Reverse Characteristics

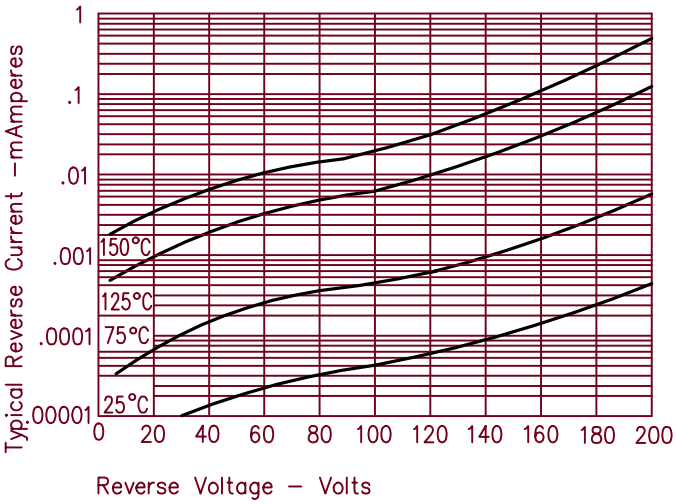

Figure 3
Typical Junction Capacitance