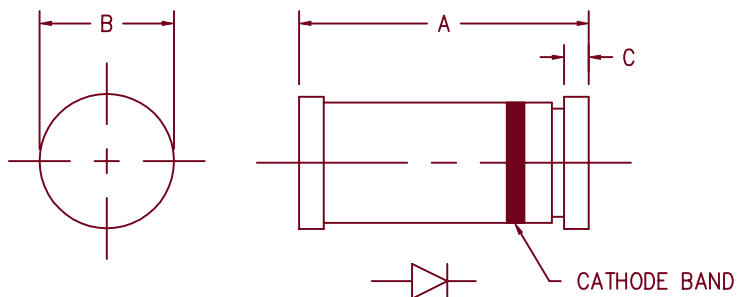


Ultra Fast Recovery Rectifier UF140SM — UF160SM



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

GLASS HERMETIC D0213AB

Microsemi Catalog Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage
UF140SM	400V	400V
UF160SM	600V	600V

- Ultra fast recovery
- 175°C junction temperature
- VRRM 400 to 600 volts
- 1 Amp current rating
- tRR 50nS max

Electrical Characteristics

Average forward current	I _{F(AV)} 1.0 Amps	TA = 130°C Square wave, R _{θJEC} = 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} 1.2 Volts	I _{FM} = 1.0A; T _J = 25°C*
Max reverse recovery time	t _{RR} 50 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 _{θJEC}	45°C/W Junction to end cap
Weight		.004 ounces (0.012 grams) typical

11-20-01 Rev. IR

UF140SM — UF160SM

Figure 1
Maximum Forward Characteristics

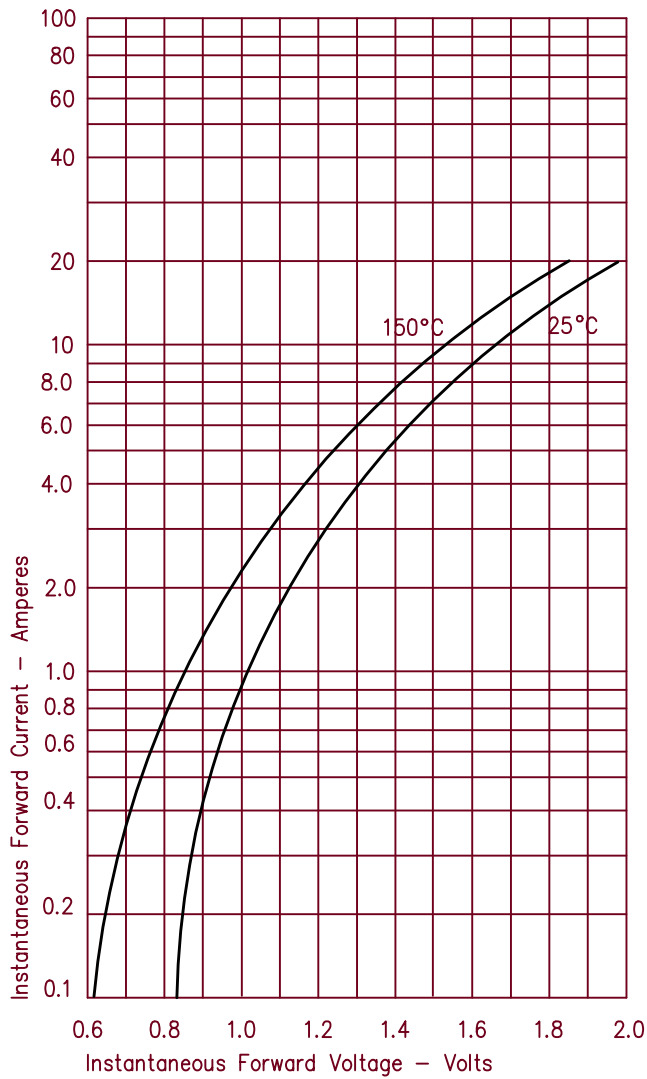


Figure 3
Typical Junction Capacitance

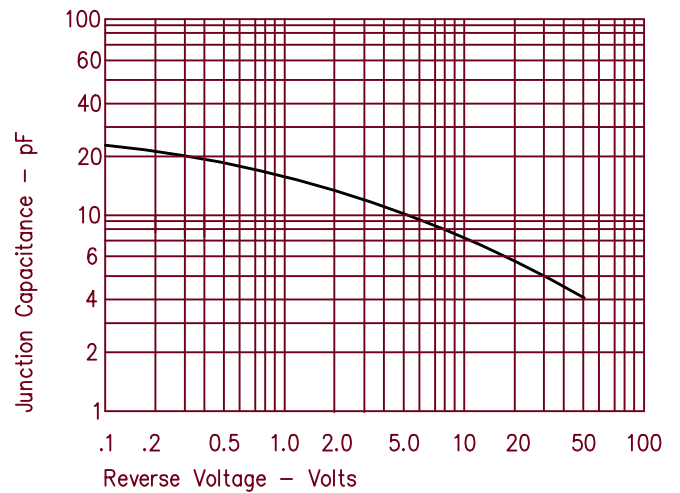


Figure 2
Typical Reverse Characteristics

