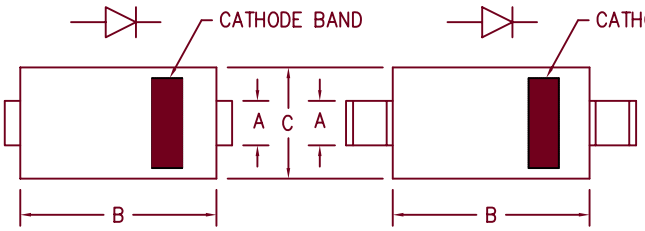
Ultra Fast Recovery Rectifiers

UFS360 – UFS380



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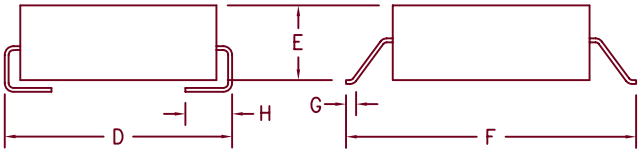

Dim.	Inches		Millimeter		
	Minimum	Maximum	Minimum	Maximum	Notes
A	.117	.123	2.97	3.12	
B	.260	.280	6.60	7.11	
C	.220	.245	5.59	6.22	
D	.307	.322	7.80	8.18	
E	.075	.095	1.91	2.41	
F	.380	.400	9.65	10.16	
G	.025	.040	.640	1.02	
H	.030	.060	.760	1.52	

Microsemi Catalog Number	Industry Part Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage
*UFS360	ER3J	600V	600V
*UFS370		700V	700V
*UFS380	ER3K	800V	800V

*Add Suffix J For J Lead or G For Gull Wing Lead Configuration

- Ultra Fast Recovery
- 175°C Junction Temperature
- V_{RRM} 600 to 800 Volts
- 3 Amp Current Rating
- t_{RR} 60ns Max.

Electrical Characteristics

Average forward current	$I_{F(AV)}$ 3.0 Amps	Square wave
Maximum surge current	I_{FSM} 100 Amps	8.3ms, half sine, T_J = 175°C
Max peak forward voltage	V_{FM} 1.2 Volts	I_{FM} = 3.0A; T_J = 25°C*
Max reverse recovery time	t_{RR} 60 ns	1/2A, 1A, 1/4A, T_J = 25°C
Max peak reverse current	I_{RM} 10 µA	V_{RRM}, T_J = 25°C
Typical junction capacitance	C_J 19 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}	−55°C to 175°C
Operating junction temp range	T_J	−55°C to 175°C
Maximum thermal resistance	$R_{\Theta JL}$	25°C/W Junction to lead
Weight		.008 ounces (0.22 grams) typical

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Figure 1
Typical Forward Characteristics

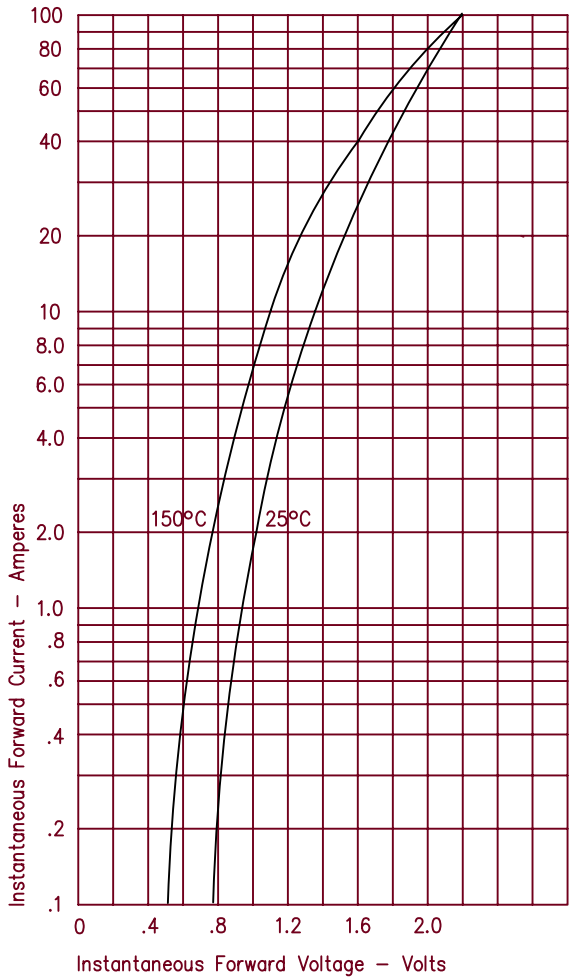

Figure 2
Typical Reverse Characteristics

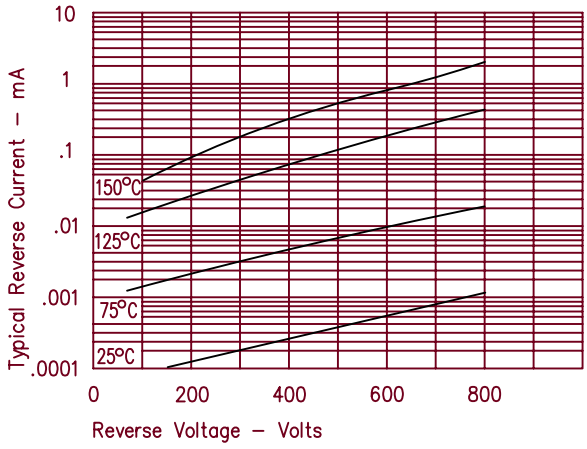

Figure 3
Typical Junction Capacitance