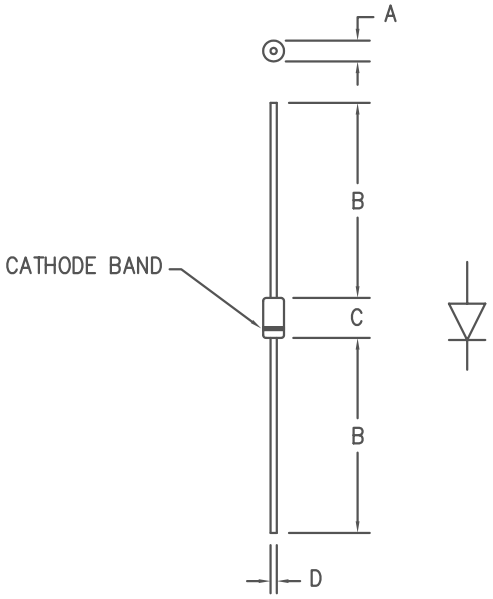
Ultra Fast Recovery Rectifiers
UF160 – UF180



Dim.	Inches		Millimeter		
	Minimum	Maximum	Minimum	Maximum	Notes
A	.081	.107	2.057	2.718	Dia.
B	1.10	---	27.94	---	
C	.160	.205	4.064	5.207	
D	.028	.034	.711	.864	Dia.

PLASTIC DO41

Microsemi Catalog Number	Industry Part Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage
UF160	MUR160 UF4005, UF4005GP VHE260	600V	600V
UF170		700V	700V
UF180	MUR180 UF4006, UF4006GP	800V	800V

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

Electrical Characteristics

Average forward current	$I_{F(AV)}$ 1.0 Amps	T_L = 100°C, Square wave, $R_{\theta JL}$ = 25° C/W, L = 1/4"
Maximum surge current	I_{FSM} 25 Amps	8.3ms, half sine, T_J = 175°C
Max peak forward voltage	V_{FM} .89 Volts	I_{FM} = 0.1A: T_J = 25°C*
Max peak forward voltage	V_{FM} 1.2 Volts	I_{FM} = 1.0A: 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} 20 µA	V_{RRM}, T_J = 25°C
Typical junction capacitance	C_J 5.5 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	L = 1/4" $R_{\theta JL}$	25°C/W Junction to Lead
Weight		.011 ounces (0.34 grams) typical

7–2–04 Rev. 4

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Figure 1
Typical Forward Characteristics

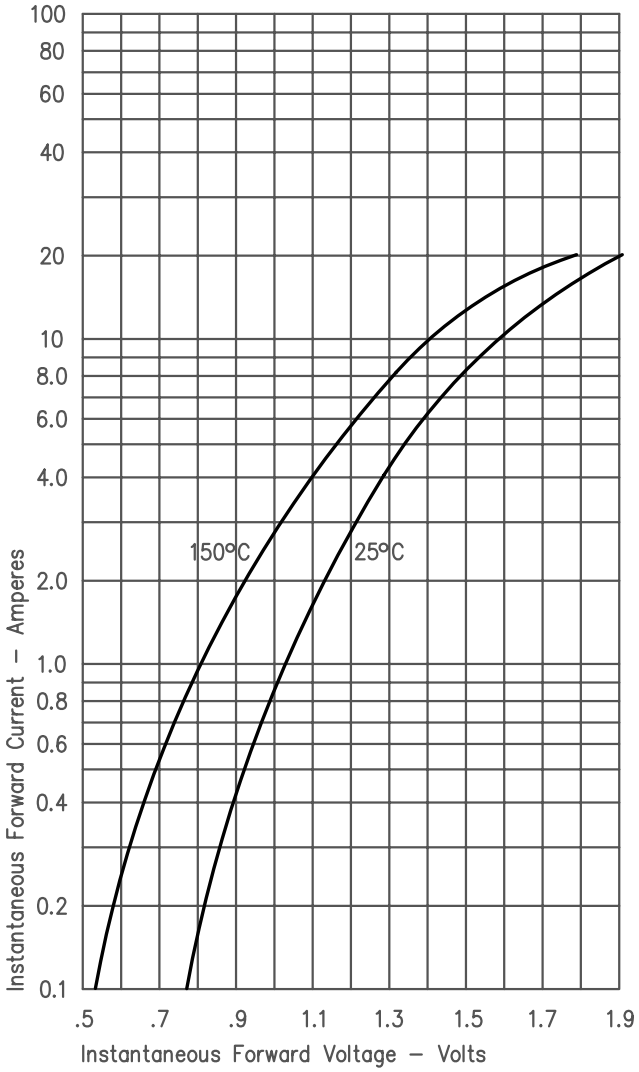

Figure 2
Typical Reverse Characteristics

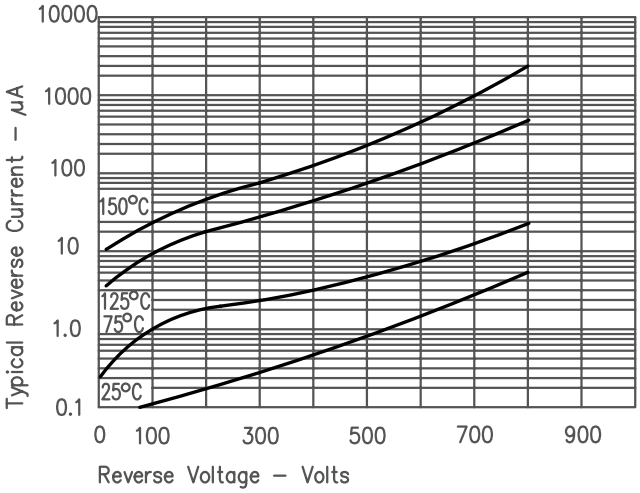

Figure 3
Typical Junction Capacitance