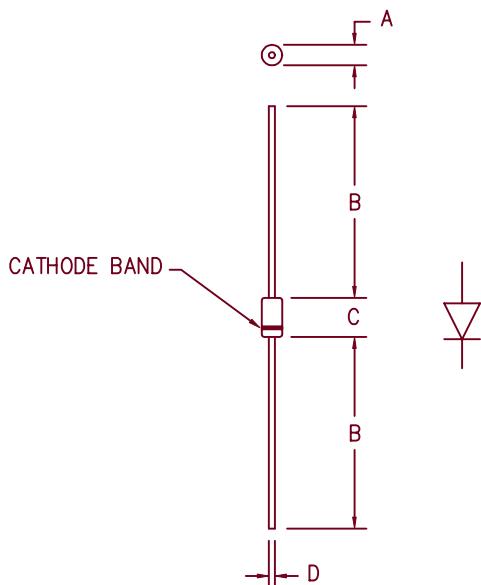


# Ultra Fast Recovery Rectifiers

## 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 Reverse Voltage	Peak Reverse Voltage
UF160	MUR160 UF4005, UF4005GP VHE260	600V	600V
UF170			
UF180	MUR180 UF4006, UF4006GP	700V 800V	700V 800V

- Ultra Fast Recovery
- 175°C Junction Temperature
- V<sub>RRM</sub> 600 to 800 Volts
- 1 Amp Current Rating
- t<sub>RR</sub> 60nS Max.

### Electrical Characteristics

Average forward current	I <sub>F(AV)</sub> 1.0 Amps	T <sub>L</sub> = 110°C, Square wave, R <sub>θJL</sub> = 15°C/W, L = 1/4"
Maximum surge current	I <sub>FSM</sub> 25 Amps	8.3ms, half sine, T <sub>J</sub> = 175°C
Max peak forward voltage	V <sub>FM</sub> .89 Volts	I <sub>FM</sub> = 0.1A: T <sub>J</sub> = 25°C*
Max peak forward voltage	V <sub>FM</sub> 1.2 Volts	I <sub>FM</sub> = 1.0A: T <sub>J</sub> = 25°C*
Max reverse recovery time	t <sub>RR</sub> 60 nS	1/2A, 1A, 1/4A, T <sub>J</sub> = 25°C
Max peak reverse current	I <sub>RM</sub> 20 μA	V <sub>RRM</sub> , T <sub>J</sub> = 25°C
Typical junction capacitance	C <sub>J</sub> 5.5 pF	V <sub>R</sub> = 10V, T <sub>J</sub> = 25°C

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

### Thermal and Mechanical Characteristics

Storage temperature range	T <sub>STG</sub>	-55°C to 175°C
Operating junction temp range	T <sub>J</sub>	-55°C to 175°C
Maximum thermal resistance	L = 1/4" R <sub>θJL</sub>	15°C/W Junction to Lead
Weight		.011 ounces (0.34 grams) typical

# UF160 — UF180

Figure 1  
Typical Forward Characteristics

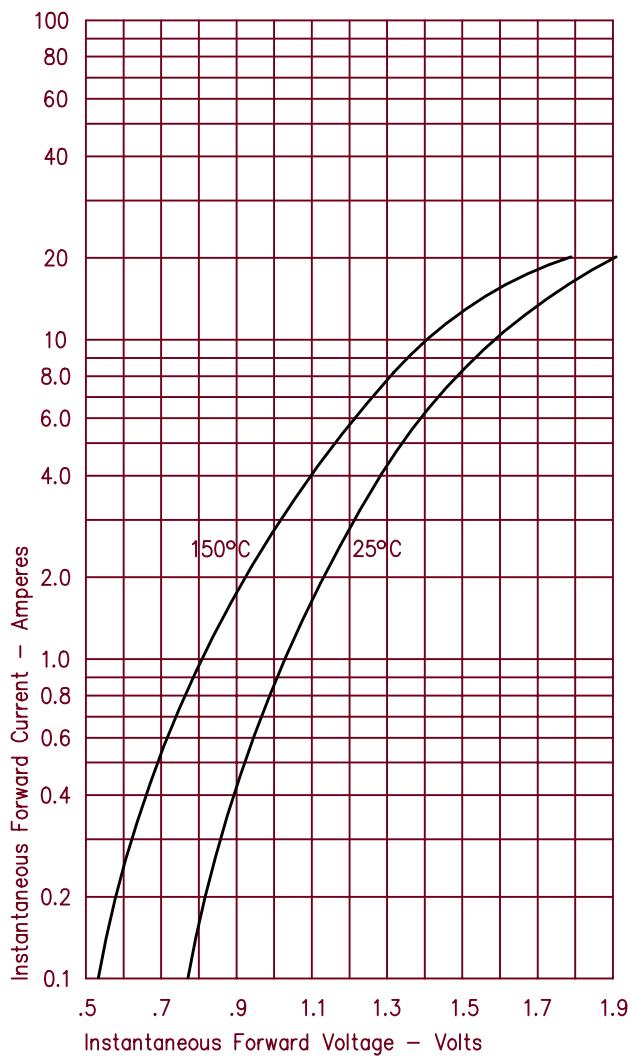


Figure 2  
Typical Reverse Characteristics

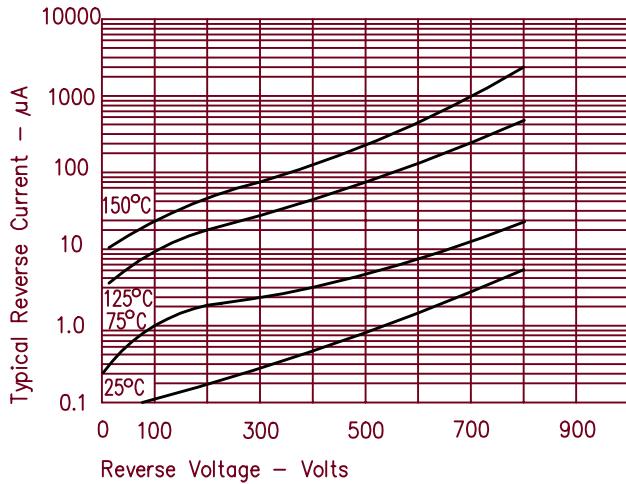


Figure 3  
Typical Junction Capacitance

