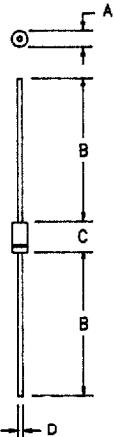


# Ultra Fast Recovery Rectifiers

## UF560, UF570, UF580



Dim.	Inches		Millimeter		
	Minimum	Maximum	Minimum	Maximum	Notes
A	.188	.260	4.78	6.50	Dia.
B	1.00	---	25.4	---	
C	.285	.375	7.24	9.52	
D	.046	.056	1.17	1.42	Dia.

D

### PLASTIC D0201AD

Microsemi  
Catalog Number

Working Peak  
Reverse Voltage

Repetitive Peak  
Reverse Voltage

UF560  
UF570  
UF580

600V  
700V  
800V

600V  
700V  
800V

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

### Electrical Characteristics

Average forward current

I<sub>F(AV)</sub> 5.0 Amps

T<sub>A</sub> = 109°C, Square wave, R<sub>θJL</sub> = 11°C/W, L = 1/8"

Average forward current

I<sub>F(AV)</sub> 5.0 Amps

T<sub>A</sub> = 87°C, Square wave, R<sub>θJL</sub> = 14.7°C/W, L = 3/8"

Maximum surge current

I<sub>FSM</sub> 175 Amps

8.3ms, half sine, T<sub>J</sub> = 175°C

Max peak forward voltage

V<sub>FM</sub> 1.2 Volts

I<sub>FM</sub> = 5.0A; 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

Typical reverse recovery time

t<sub>RR</sub> 40 ns

1/2A, 1A, 1/4A, T<sub>J</sub> = 25°C

Max peak reverse current

I<sub>RM</sub> 10 mA

V<sub>RRM</sub>, T<sub>J</sub> = 150°C

Max peak reverse current

I<sub>RM</sub> 10 μA

V<sub>RRM</sub>, T<sub>J</sub> = 25°C

Typical junction capacitance

C<sub>J</sub> 32pF

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>

-40°C to 175°C

Operating junction temp range

T<sub>J</sub>

-40°C to 175°C

Maximum thermal resistance

L = 1/8" R<sub>θJL</sub>

11°C/W Junction to Lead

Weight

L = 3/8" R<sub>θJL</sub>

14.7°C/W Junction to Lead

.011 ounces (0.34 grams) typical

# UF560, UF570, UF580

Figure 1  
Typical Forward Characteristics

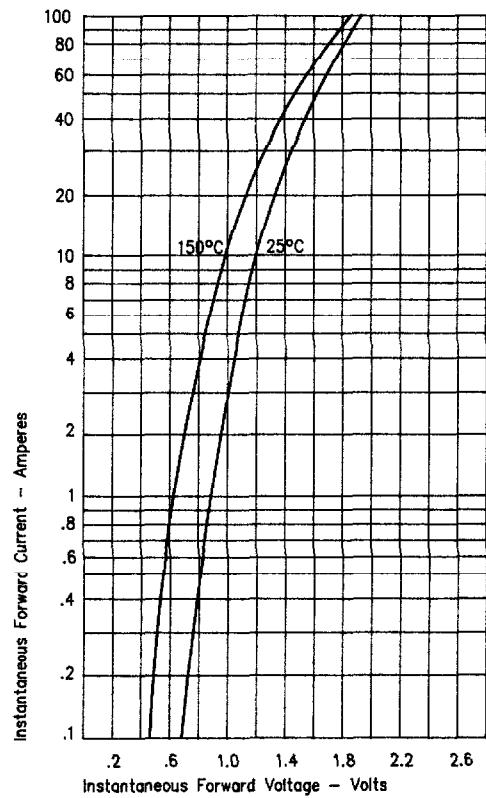


Figure 3  
Typical Junction Capacitance

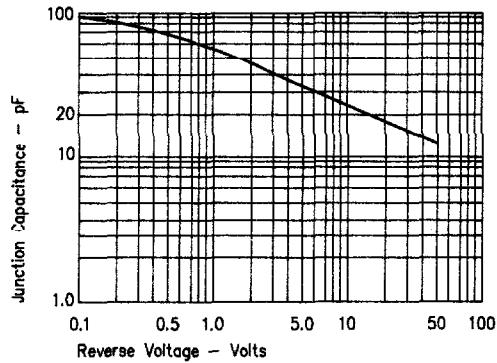


Figure 2  
Typical Reverse Characteristics

