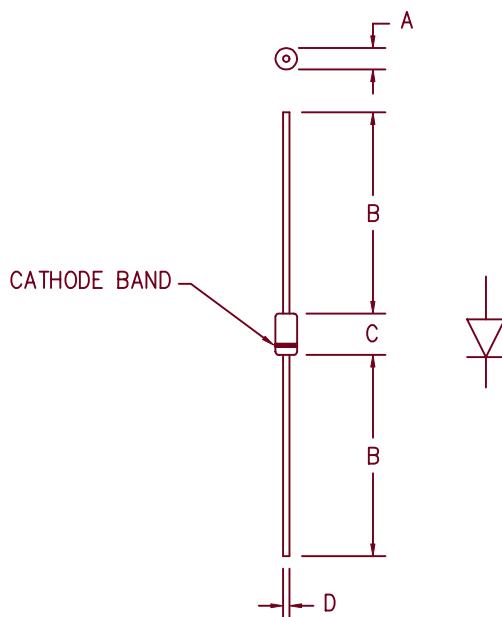


# Ultra Fast Recovery Rectifiers

## UF560 — UF580



Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
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.

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
- VRRM 600 to 800 Volts
- 5 Amp Current Rating
- $t_{RR}$  60 ns Max.

### Electrical Characteristics

Average forward current  
Average forward current  
Maximum surge current  
Max peak forward voltage  
Max reverse recovery time  
Max peak reverse current  
Typical junction capacitance

$I_F(AV)$  5.0 Amps  
 $I_F(AV)$  5.0 Amps  
 $I_{FSM}$  175 Amps  
 $V_{FM}$  1.35 Volts  
 $t_{RR}$  60 ns  
 $I_{RM}$  10  $\mu$ A  
 $C_J$  32pF

$T_A = 109^\circ\text{C}$ , Square wave,  $R_{\theta JL} = 11^\circ\text{C}/W$ ,  $L = 1/8"$   
 $T_A = 87^\circ\text{C}$ , Square wave,  $R_{\theta JL} = 14.7^\circ\text{C}/W$ ,  $L = 3/8"$   
8.3ms, half sine,  $T_J = 175^\circ\text{C}$   
 $|FM| = 5.0A$ :  $T_J = 25^\circ\text{C}^*$   
 $1/2A, 1A, 1/4A$ ,  $T_J = 25^\circ\text{C}$   
 $V_{RRM, TJ} = 25^\circ\text{C}$   
 $V_R = 10V, TJ = 25^\circ\text{C}$

\*Pulse test: Pulse width 300  $\mu$ sec, Duty cycle 2%

### Thermal and Mechanical Characteristics

Storage temperature range  
Operating junction temp range  
Maximum thermal resistance

$T_{STG}$   
 $T_J$   
 $L = 1/8" R_{\theta JL}$   
 $L = 3/8" R_{\theta JL}$

-55°C to 175°C  
-55°C to 175°C  
11°C/W Junction to Lead  
14.7°C/W Junction to Lead  
.011 ounces (0.34 grams) typical

# UF560 - UF580

Figure 1  
Typical Forward Characteristics

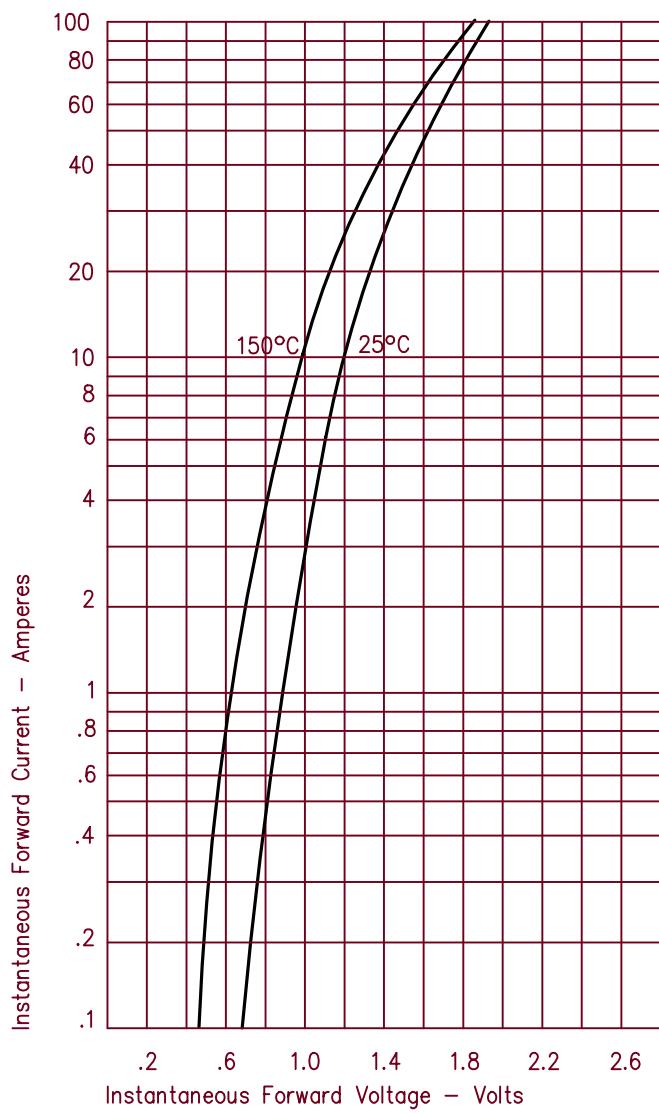


Figure 3  
Typical Junction Capacitance

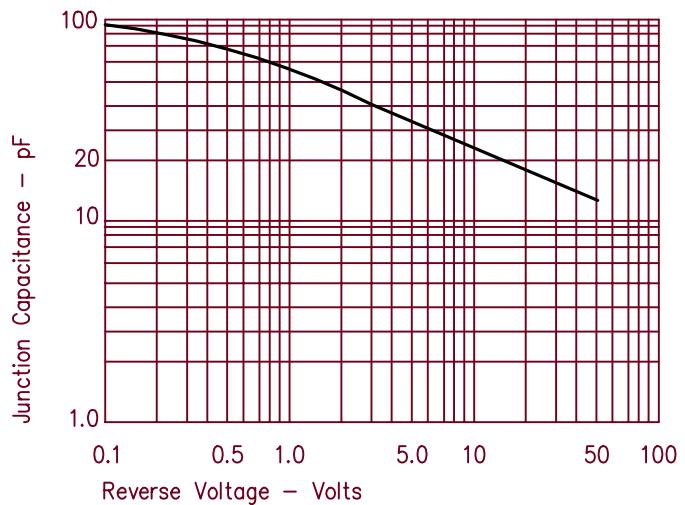


Figure 2  
Typical Reverse Characteristics

