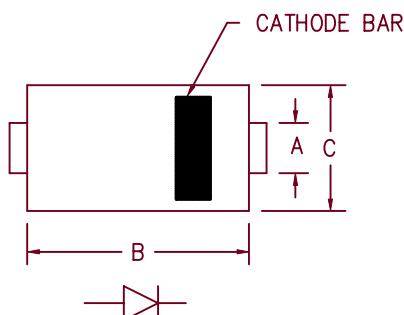
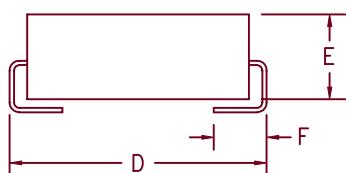


# Ultra Fast Recovery Rectifiers

## UFS130J – UFS150J



Dim.	Inches		Millimeter		
	Minimum	Maximum	Minimum	Maximum	Notes
A	.073	.087	1.85	2.21	
B	.160	.180	4.06	4.57	
C	.130	.155	3.30	3.94	
D	.205	.220	5.21	5.59	
E	.075	.130	1.91	3.30	
F	.030	.060	.760	1.52	



DO-214BA Package

Microsemi  
Catalog Number

Working  
Peak Reverse  
Voltage

UFS130J      300V  
UFS140J      400V  
UFS150J      500V

Repetitive  
Peak Reverse  
Voltage

300V  
400V  
500V

- Ultra Fast Recovery
- 175°C Junction Temperature
- VRRM 300 to 500 Volts
- 1 Amp Current Rating
- $t_{RR}$  50nS Max.

### Electrical Characteristics

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

$I_F(AV)$  1.0 Amps  
 $I_{FSM}$  30 Amps  
 $V_{FM}$  .80 Volts  
 $V_{FM}$  1.1 Volts  
 $t_{RR}$  50 nS  
 $I_{RM}$  10  $\mu$ A  
 $C_J$  2.5 pF

$T_L = 143^\circ\text{C}$ , Square wave  $R_{\theta JL} = 15^\circ\text{C}/\text{W}$   
8.3ms, half sine,  $T_J = 175^\circ\text{C}$   
 $I_{FM} = 0.1A$ :  $T_J = 25^\circ\text{C}$ \*  
 $I_{FM} = 1.0A$ :  $T_J = 25^\circ\text{C}$ \*  
 $1/2A$ ,  $1A$ ,  $1/4A$ ,  $T_J = 25^\circ\text{C}$   
 $V_{RRM}, T_J = 25^\circ\text{C}$   
 $V_R = 10V, T_J = 25^\circ\text{C}$

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

### Thermal and Mechanical Characteristics

Storage temperature range  
Operating junction temp range  
Maximum thermal resistance  
Weight

$T_{STG}$   
 $T_J$   
 $R_{\theta JL}$

$-55^\circ\text{C}$  to  $175^\circ\text{C}$   
 $-55^\circ\text{C}$  to  $175^\circ\text{C}$   
 $15^\circ\text{C}/\text{W}$  Junction to lead  
.0047 ounces (.013 grams) typical

# UFS130J - UFS150J

Figure 1  
Typical Forward Characteristics

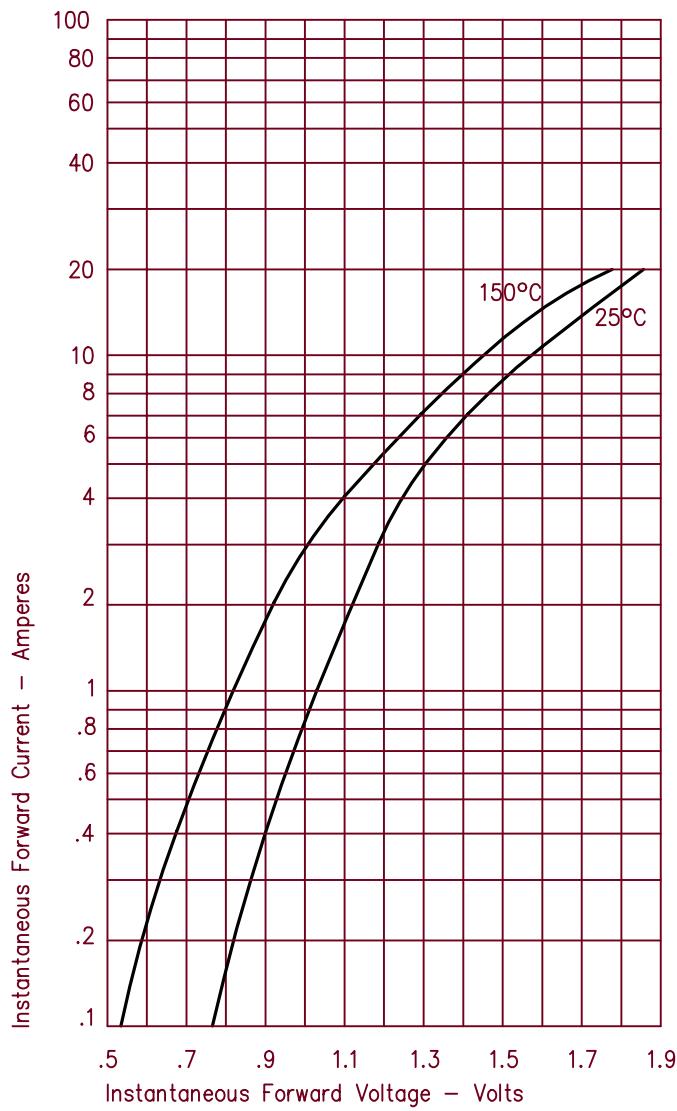


Figure 3  
Typical Junction Capacitance

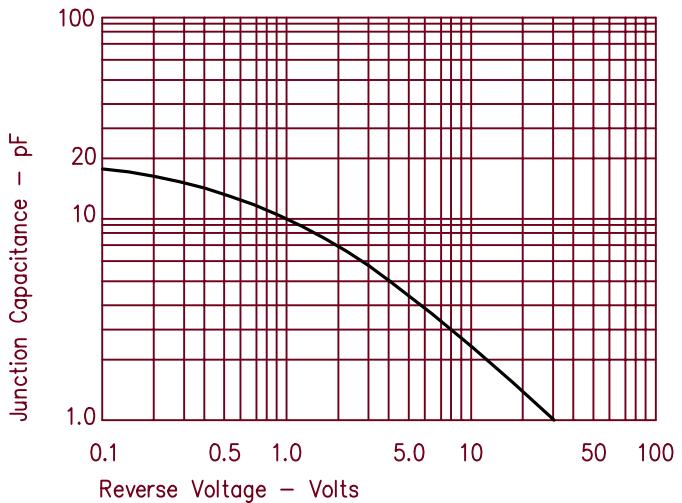


Figure 2  
Typical Reverse Characteristics

