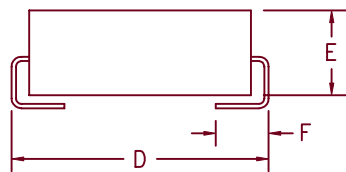
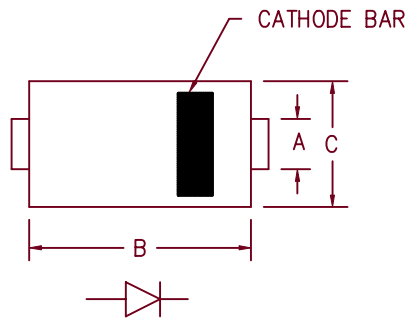


# Ultra Fast Recovery Rectifiers

## UFS160J — UFS180J



Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
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	

### D0-214BA Package

Microsemi Catalog Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage
UFS160J	600V	600V
UFS170J	700V	700V
UFS180J	800V	800V

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

Electrical Characteristics		
Average forward current	$I_F(AV)$ 1.0 Amps	$T_L = 140^\circ C$ , Square wave, $R_{\theta JL} = 15^\circ C/W$
Maximum surge current	$I_{FSM}$ 25 Amps	8.3ms, half sine, $T_J = 175^\circ C$
Max peak forward voltage	$V_{FM}$ .89 Volts	$I_{FM} = 0.1A; T_J = 25^\circ C^*$
Max peak forward voltage	$V_{FM}$ 1.2 Volts	$I_{FM} = 1.0A; T_J = 25^\circ C^*$
Max reverse recovery time	$t_{RR}$ 60 nS	1/2A, 1A, 1/4A, $T_J = 25^\circ C$
Max peak reverse current	$I_{RM}$ 20 $\mu A$	$V_{RRM}, T_J = 25^\circ C$
Typical junction capacitance	$C_J$ 5.5 pF	$V_R = 10V, T_J = 25^\circ C$

\*Pulse test: Pulse width 300  $\mu sec$ , 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	$R_{\theta JL}$	15°C/W Junction to lead
Weight		.0047 ounces (.013 grams) typical

6-9-00 Rev. 1

# UFS160J — UFS180J

Figure 1  
Typical Forward Characteristics

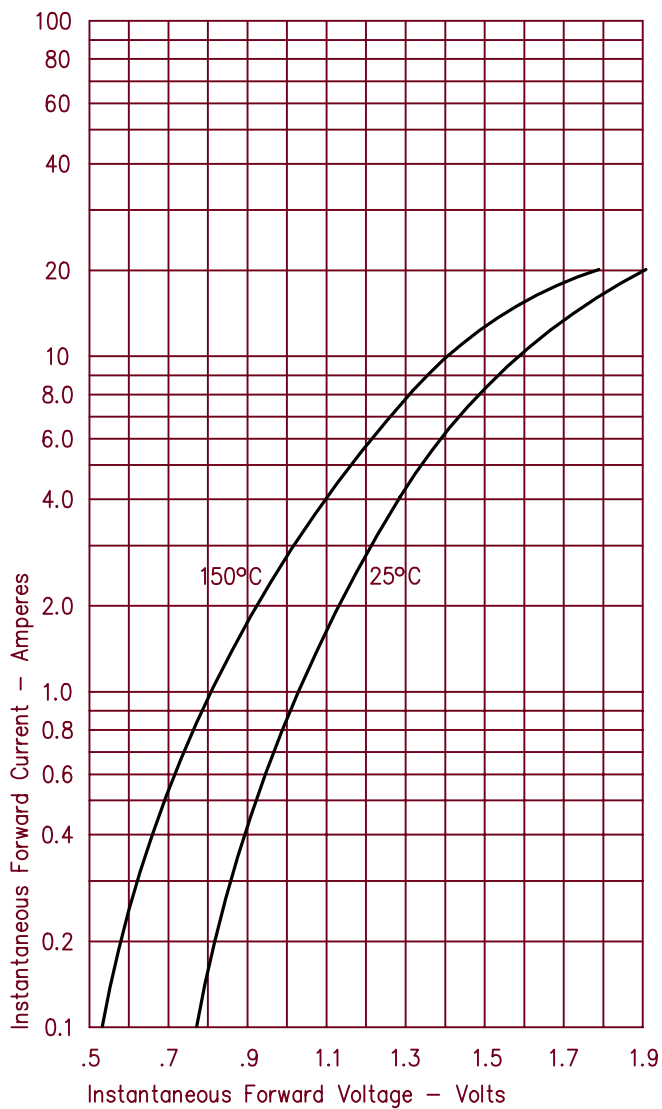


Figure 3  
Typical Junction Capacitance

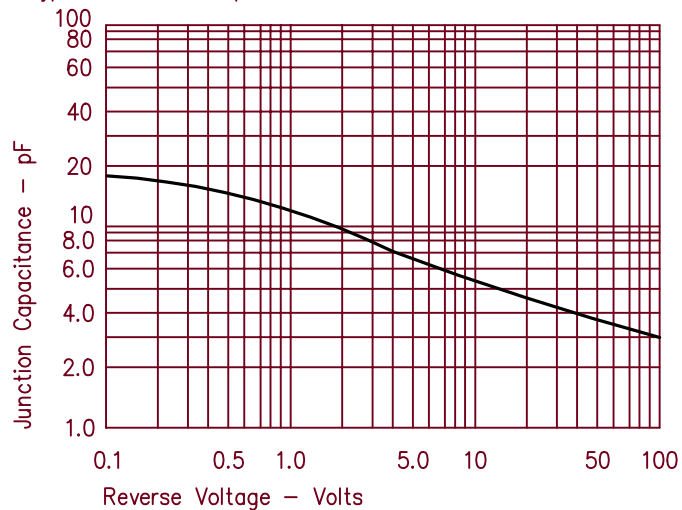


Figure 2  
Typical Reverse Characteristics

