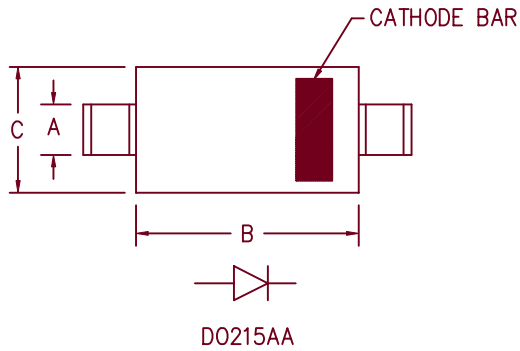
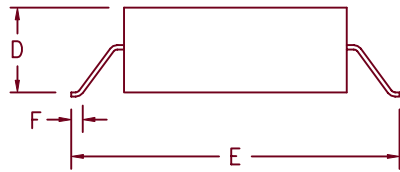


# Ultra Fast Recovery Rectifiers

## UFS130G — UFS150G



Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	.081	.087	2.06	2.21	
B	.160	.180	4.06	4.57	
C	.130	.155	3.30	3.94	
D	.075	.095	1.90	2.41	
E	.270	.290	6.86	7.37	
F	.015	.030	.381	.762	



Microsemi Catalog Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage
UFS130G	300V	300V
UFS140G	400V	400V
UFS150G	500V	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	$I_F(AV)$ 1.0 Amps	$T_L = 138^\circ C$ , Square wave $R_{\theta JL} = 25^\circ C/W$
Maximum surge current	$I_{FSM}$ 30 Amps	8.3ms, half sine, $T_J = 175^\circ C$
Max peak forward voltage	$V_{FM}$ .80 Volts	$I_{FM} = 0.1A; T_J = 25^\circ C^*$
Max peak forward voltage	$V_{FM}$ 1.1 Volts	$I_{FM} = 1.0A; T_J = 25^\circ C^*$
Max reverse recovery time	$t_{RR}$ 50 nS	1/2A, 1A, 1/4A, $T_J = 25^\circ C$
Max peak reverse current	$I_{RM}$ 10 $\mu A$	$V_{RRM}, T_J = 25^\circ C$
Typical junction capacitance	$C_J$ 2.5 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	$T_{STG}$	$-55^\circ C$ to $175^\circ C$
Operating junction temp range	$T_J$	$-55^\circ C$ to $175^\circ C$
Maximum thermal resistance	$R_{\theta JL}$	$25^\circ C/W$ Junction to lead
Weight		.0047 ounces (.013 grams) typical

6-8-00 Rev. 1

# UFS130G — UFS150G

Figure 1  
Typical Forward Characteristics

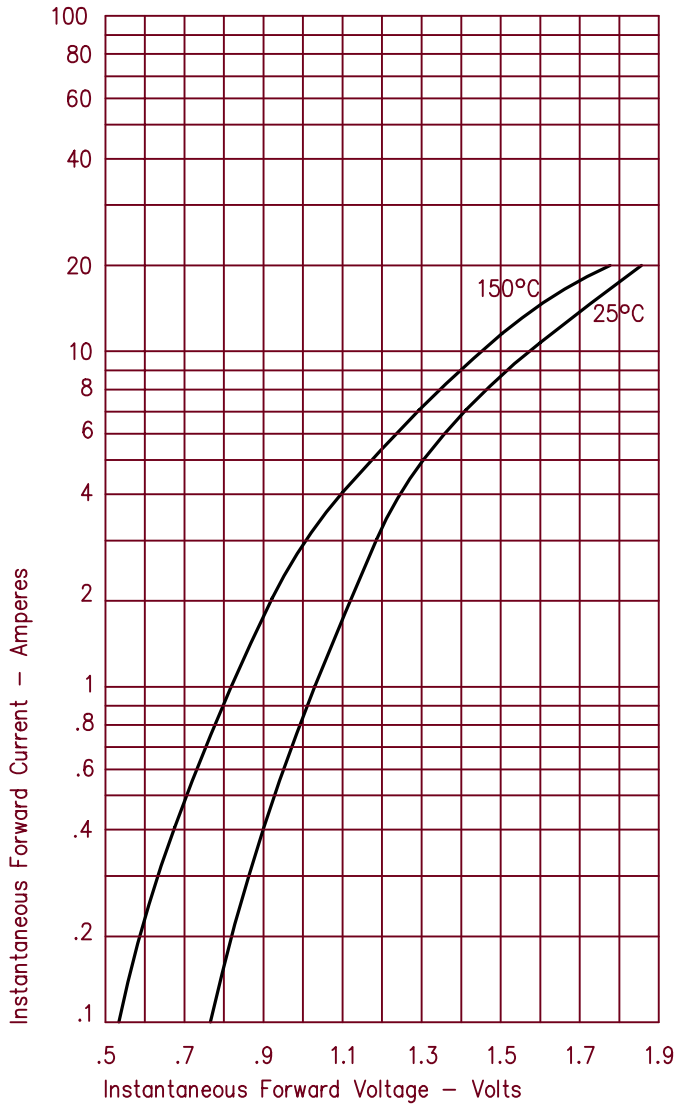


Figure 3  
Typical Junction Capacitance

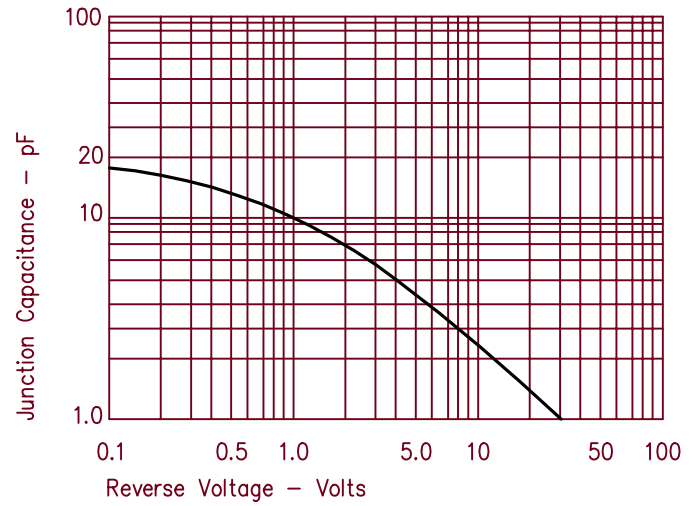


Figure 2  
Typical Reverse Characteristics

