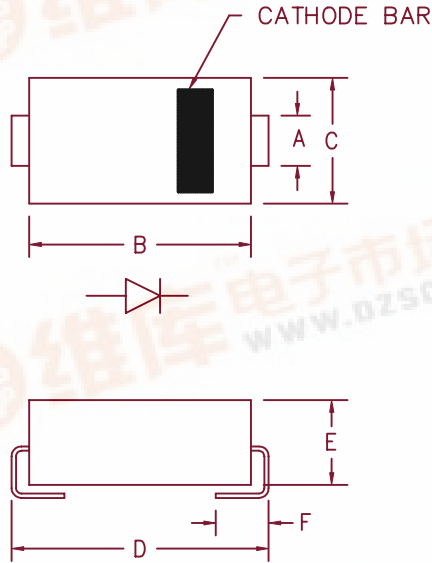


# Ultra Fast Recovery Rectifiers

## UFS110J — UFS120J



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	

### DO-214BA Package

Microsemi Catalog Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage
UFS110J	100V	100V
UFS115J	150V	150V
UFS120J	200V	200V

- Ultra Fast Recovery
- 175°C Junction Temperature
- VRRM 100 to 200 Volts
- 1 Amp Current Rating
- $t_{RR}$  30ns Max.

Electrical Characteristics		
Average forward current	I <sub>F(AV)</sub> 1.0 Amps	T <sub>L</sub> = 145°C, Square wave, R <sub>θJL</sub> = 15°C/W
Maximum surge current	I <sub>FSM</sub> 35 Amps	8.3ms, half sine, T <sub>J</sub> = 175°C
Max peak forward voltage	V <sub>FM</sub> .75 Volts	I <sub>FM</sub> = 0.1A; T <sub>J</sub> = 25°C*
Max peak forward voltage	V <sub>FM</sub> .95 Volts	I <sub>FM</sub> = 1.0A; T <sub>J</sub> = 25°C*
Max reverse recovery time	t <sub>RR</sub> 30 ns	1/2A, 1A, 1/4A, T <sub>J</sub> = 25°C
Max peak reverse current	I <sub>RM</sub> 5 μA	V <sub>RRM</sub> , T <sub>J</sub> = 25°C
Typical junction capacitance	C <sub>J</sub> 10 pF	V <sub>R</sub> = 10V, T <sub>J</sub> = 25°C

\*Pulse test: Pulse width 300 μsec, Duty cycle 2%

Thermal and Thermal Characteristics		
Storage temperature range	T <sub>STG</sub>	-55°C to 175°C
Operating junction temp range	T <sub>J</sub>	-55°C to 175°C
Maximum thermal resistance	R <sub>θJL</sub>	15°C/W Junction to lead
Weight		.0047 ounces (.013 grams) typical



# UFS110J — UFS120J

Figure 1  
Typical Forward Characteristics

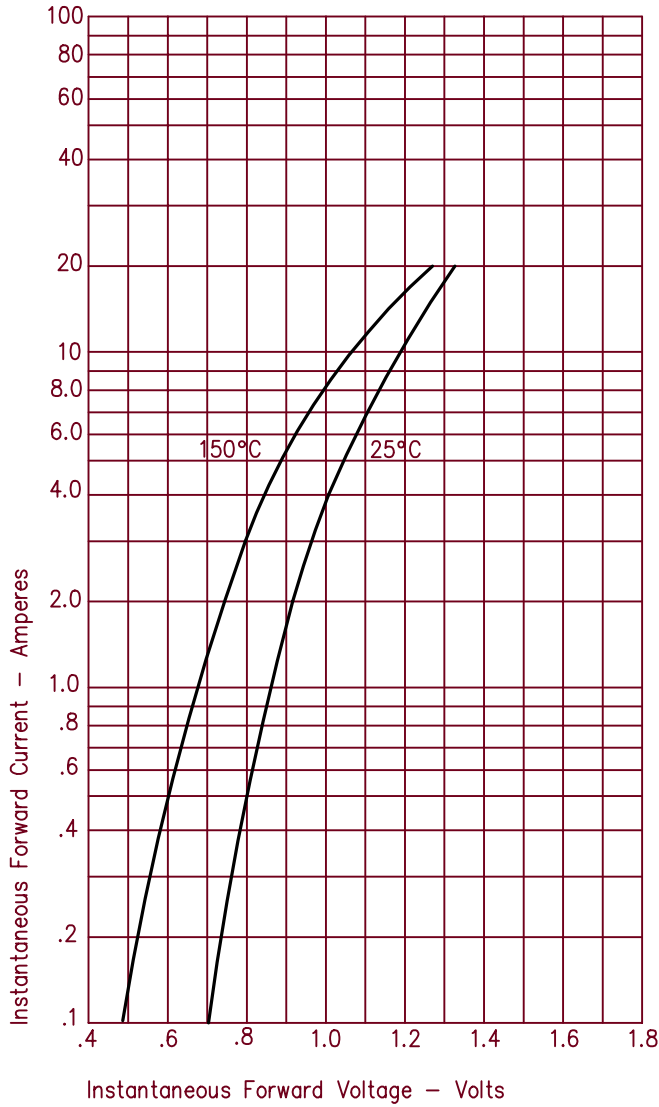


Figure 3  
Typical Junction Capacitance

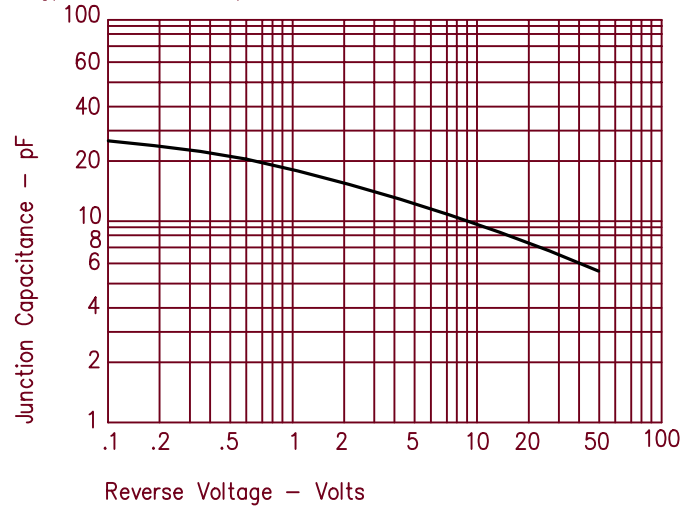


Figure 2  
Typical Reverse Characteristics

