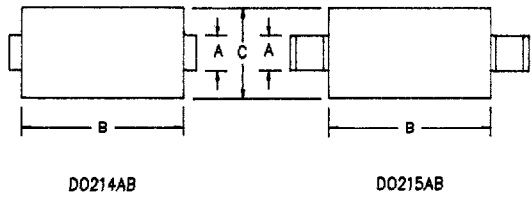
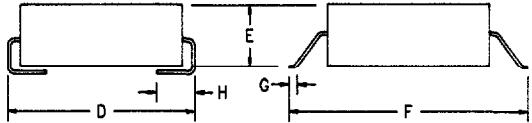


# Ultra Fast Recovery Rectifiers

## UFS530, UFS540, UFS550



Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	.117	.123	2.21	2.97	
B	.260	.280	4.57	6.60	
C	.220	.245	3.94	5.58	
D	.307	.322	5.99	7.80	
E	.075	.095	1.90	2.41	
F	.380	.400	6.86	7.37	
G	.025	.040	.381	.762	
H	.030	.060	.760	1.52	



Microsemi Catalog Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage
*UFS530	300V	300V
*UFS540	400V	400V
*UFS550	500V	500V

\* Add Suffix J for J Lead or G for Gull Wing Lead Configuration

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

Electrical Characteristics		
Average forward current	I <sub>F(AV)</sub> 5.0 Amps	Square wave
Maximum surge current	I <sub>FSM</sub> 175 Amps	8.3ms, half sine, T <sub>J</sub> = 175°C
Max peak forward voltage	V <sub>FM</sub> 1.2 Volts	I <sub>FM</sub> = 5.0A; T <sub>J</sub> = 25°C*
Max reverse recovery time	t <sub>RR</sub> 50 nS	1/2A, 1A, 1/4A, T <sub>J</sub> = 25°C
Typical reverse recovery time	t <sub>RR</sub> 28 ns	1/2A, 1A, 1/4A, T <sub>J</sub> = 25°C
Max peak reverse current	I <sub>RM</sub> 10 μA	V <sub>R</sub> = 10V, T <sub>J</sub> = 25°C
Typical junction capacitance	C <sub>J</sub> 28 pF	V <sub>R</sub> = 10V, T <sub>J</sub> = 25°C

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

Thermal and Mechanical Characteristics		
Storage temperature range	T <sub>STG</sub>	-40°C to 175°C
Operating junction temp range	T <sub>J</sub>	-40°C to 175°C
Weight		.008 ounces (.22 grams) typical



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**Microsemi Corp.**  
**Colorado**

# UFS530, UFS540, UFS550

Figure 1  
Typical Forward Characteristics

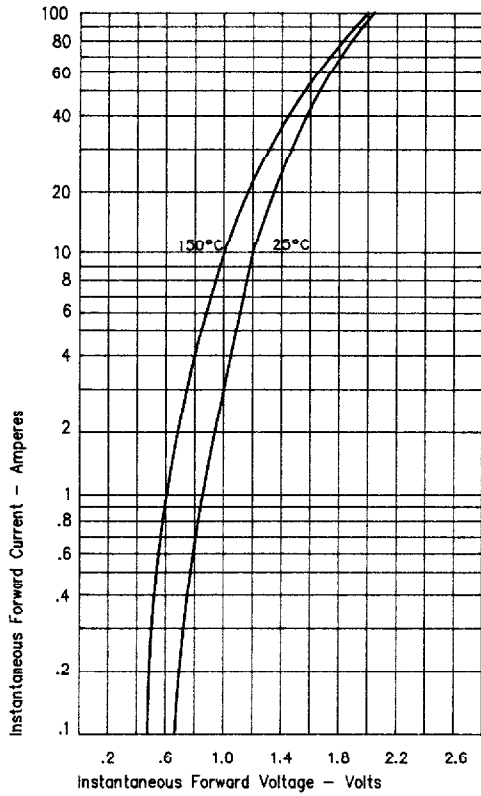


Figure 3  
Typical Junction Capacitance

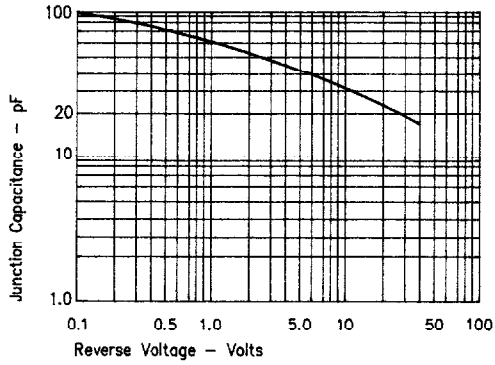


Figure 2  
Typical Reverse Characteristics

