



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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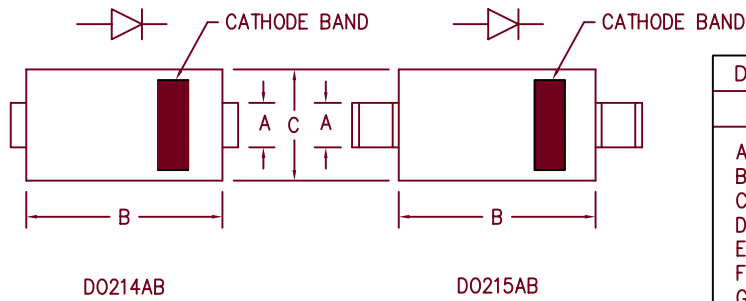
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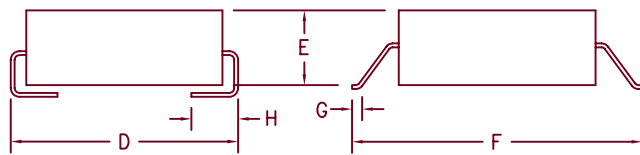


# Ultra Fast Recovery Rectifiers

## UFS510 — UFS520



Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	.117	.123	2.97	3.12	
B	.260	.280	6.60	7.11	
C	.220	.245	5.59	6.22	
D	.307	.322	7.80	8.18	
E	.075	.095	1.91	2.41	
F	.380	.400	9.65	10.16	
G	.025	.040	.640	1.02	
H	.030	.060	.760	1.52	



Microsemi Catalog Number	Peak Reverse Voltage	Peak Reverse Voltage
UFS510	100V	100V
UFS515	150V	150V
UFS520	200V	200V

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

- Ultra Fast Recovery
- 175°C Junction Temperature
- VRRM 100 to 200 Volts
- 5 Amp current rating
- <sup>†</sup>RR 30ns 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> .95 Volts	I <sub>FM</sub> = 5.0A; 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> 2 mA	V <sub>R</sub> = 10V, 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> 58 pF	

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

Thermal and Mechanical 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>	22°C/W Junction to lead
Weight		.008 ounces (.22 grams) typical



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05-08-07 Rev. 2

# UFS510 — UFS520

Figure 1  
Typical Forward Characteristics

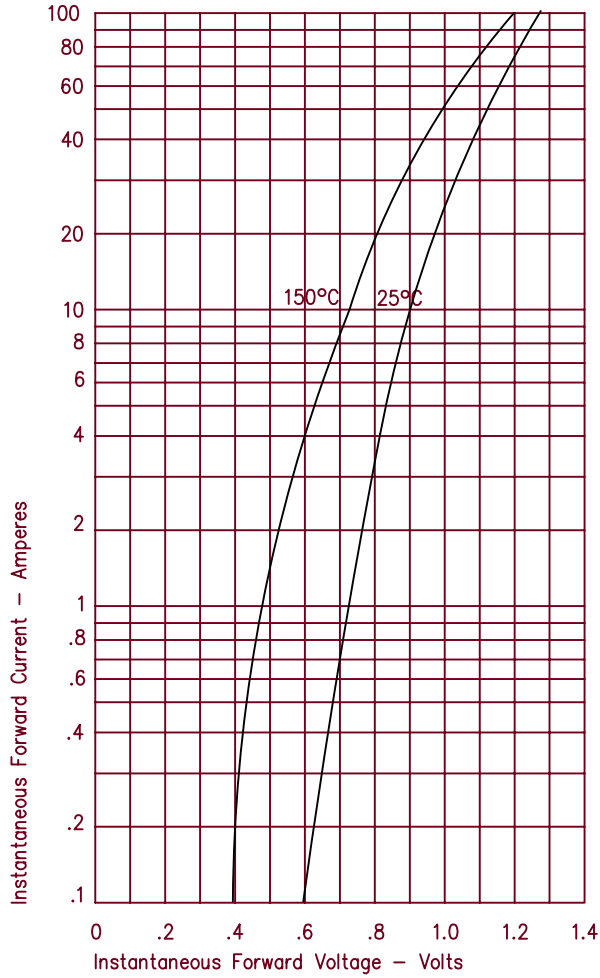


Figure 3  
Typical Junction Capacitance

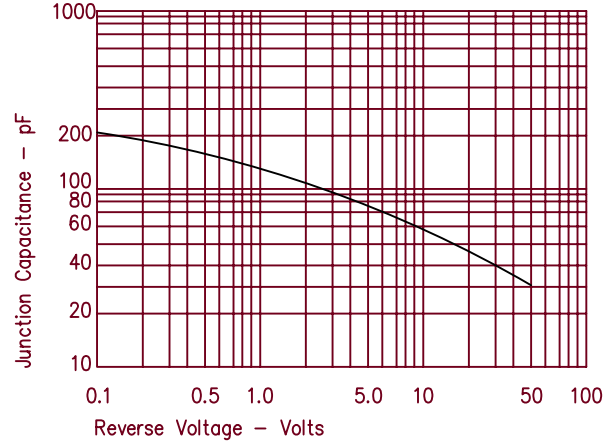


Figure 2  
Typical Reverse Characteristics

