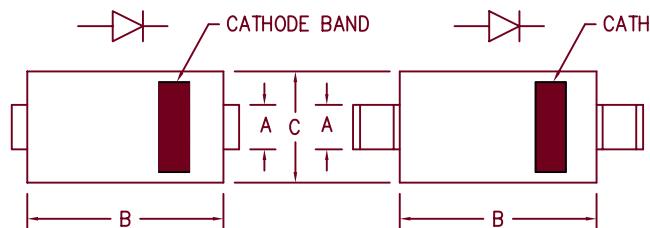


Ultra Fast Recovery Rectifiers

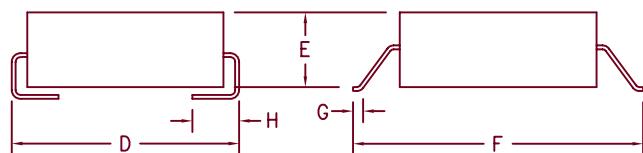
UFS510 — UFS520



DO214AB

DO215AB

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
- V_{RRM} 100 to 200 Volts
- 5 Amp current rating
- t_{RR} 30ns Max.

Electrical Characteristics

Average forward current
Maximum surge current
Max peak forward voltage
Max reverse recovery time
Max peak reverse current
Max peak reverse current
Typical junction capacitance

I_{F(AV)} 5.0 Amps
I_{FSM} 175 Amps
V_{FM} .95 Volts
t_{RR} 30 ns
I_{RM} 2 mA
I_{RM} 10 μ A
C_J 58 pF

Square wave
8.3ms, half sine, T_J = 175°C
I_{FM} = 5.0A; T_J = 25°C*
1/2A, 1A, 1/4A, T_J = 25°C
V_{RRM}, T_J = 150°C
V_{RRM}, T_J = 25°C
V_R = 10V, T_J = 25°C

*Pulse test: Pulse width 300 μ sec, Duty cycle 2%

Thermal and Mechanical Characteristics

Storage temperature range
Operating junction temp range
Maximum thermal resistance
Weight

T_{STG}
T_J
R_{θJL}

-55°C to 175°C
-55°C to 175°C
22°C/W Junction to lead
.008 ounces (.22 grams) typical

 SCOTTSDALE
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05-08-07 Rev. 2

UFS510 — UFS520

Figure 1
Typical Forward Characteristics

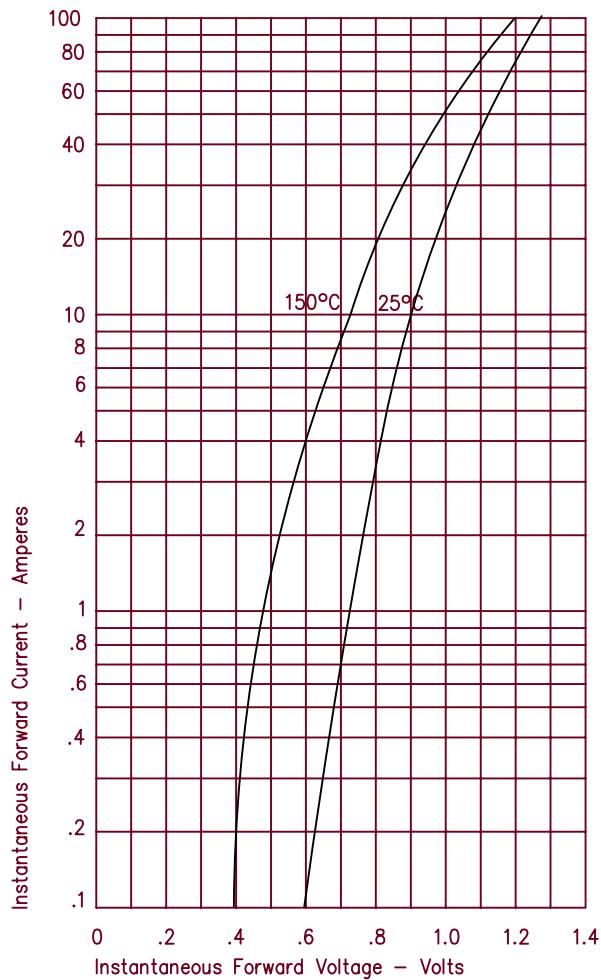


Figure 3
Typical Junction Capacitance

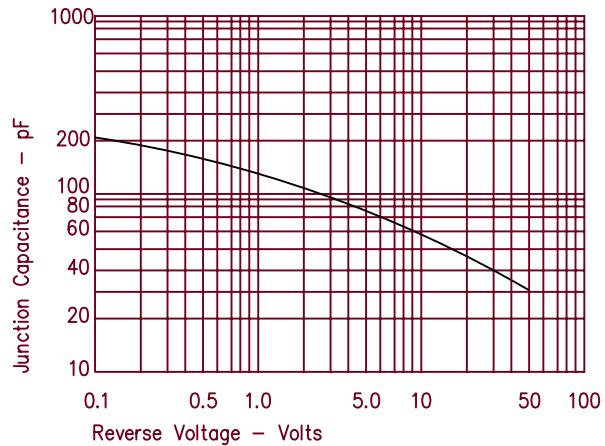


Figure 2
Typical Reverse Characteristics

