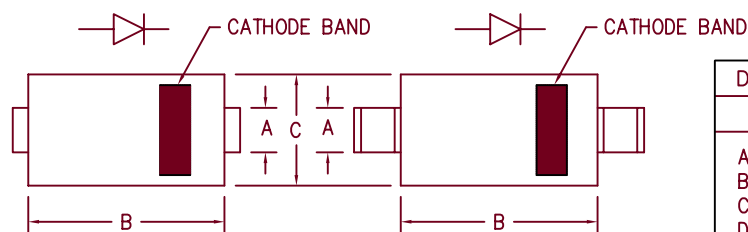


Ultra Fast Recovery Rectifiers

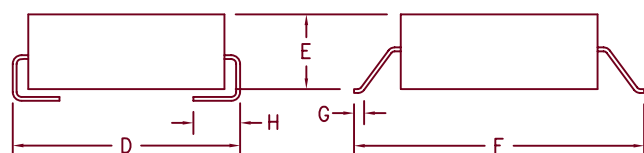
UFS510 — UFS520



D0214AB

D0215AB

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

UFS510
UFS515
UFS520

Peak Reverse
Voltage

100V
150V
200V

Peak Reverse
Voltage

100V
150V
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
- 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, $T_J = 175^\circ\text{C}$
 $I_{FM} = 5.0A; T_J = 25^\circ\text{C}^*$
 $1/2A, 1A, 1/4A, T_J = 25^\circ\text{C}$
 $V_{RRM}, T_J = 150^\circ\text{C}$
 $V_{RRM}, T_J = 25^\circ\text{C}$
 $V_R = 10V, T_J = 25^\circ\text{C}$

*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
 $R_{\theta JL}$

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



8700 East Thomas Road, P.O. Box 1390
Scottsdale, AZ 85252
PH: (480) 941-6300
FAX: (480) 947-1503
www.microsemi.com

05-08-07 Rev. 2

UFS510 — UFS520

Figure 1
Typical Forward Characteristics

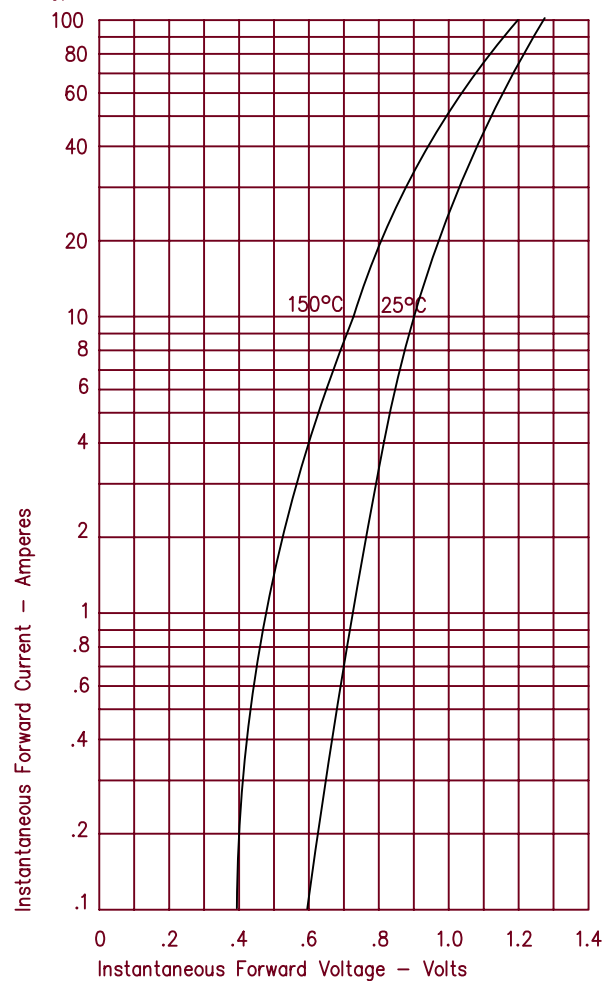


Figure 3
Typical Junction Capacitance

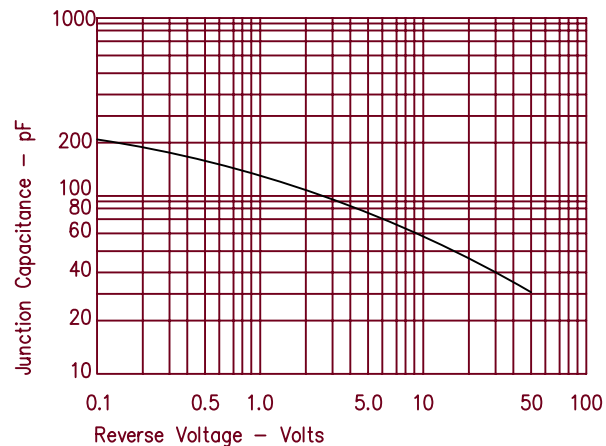


Figure 2
Typical Reverse Characteristics

