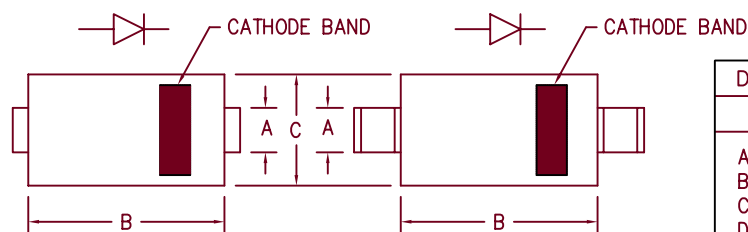


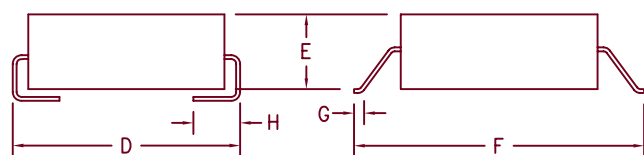
Ultra Fast Recovery Rectifiers

UFS305 — UFS320



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	Industry Part Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage
*UFS305	ER3A	50V	50V
*UFS310	ER3B	100V	100V
*UFS315		150V	150V
*UFS320	ER3D	200V	200V
	MURS320T3		

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

- Ultra Fast Recovery
- 175°C Junction Temperature
- VRRM 50 to 200 Volts
- 3 Amp Current Rating
- t_{RR} 30 ns Max.

Electrical Characteristics

Average forward current	$I_F(AV)$ 3.0 Amps	Square wave
Maximum surge current	I_{FSM} 100 Amps	8.3ms, half sine, $T_J = 175^\circ C$
Max peak forward voltage	V_{FM} .95 Volts	$I_{FM} = 3.0A; T_J = 25^\circ C^*$
Max reverse recovery time	t_{RR} 30 ns	1/2A, 1A, 1/4A, $T_J = 25^\circ C$
Max peak reverse current	I_{RM} 10 μA	$V_{RRM}, T_J = 25^\circ C$
Typical junction capacitance	C_J 38 pF	$V_R = 10V, T_J = 25^\circ C$

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

Thermal and Mechanical Characteristics

Storage temperature range	T_{STG}	$-55^\circ C$ to $175^\circ C$
Operating junction temp range	T_J	$-55^\circ C$ to $175^\circ C$
Maximum thermal resistance	$R_{\theta JL}$	25°C/W Junction to lead
Weight		.008 ounces (0.22 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. 3

UFS305 — UFS320

Figure 1
Typical Forward Characteristics

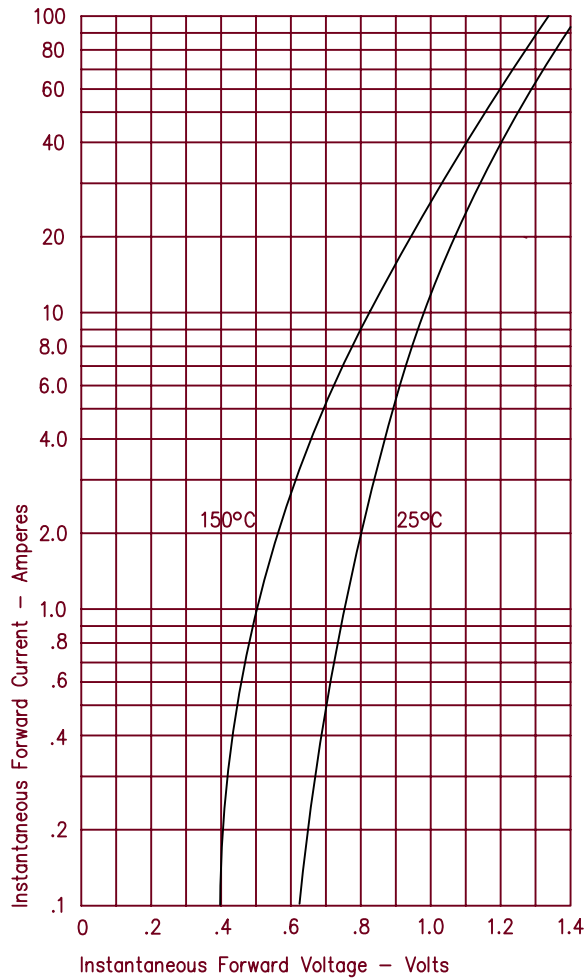


Figure 3
Typical Junction Capacitance

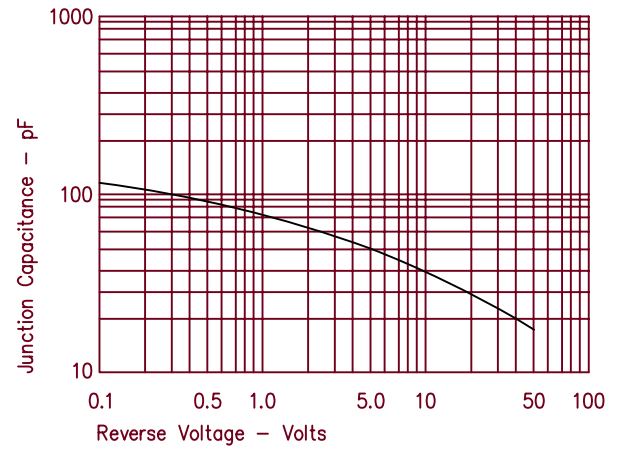


Figure 2
Typical Reverse Characteristics

