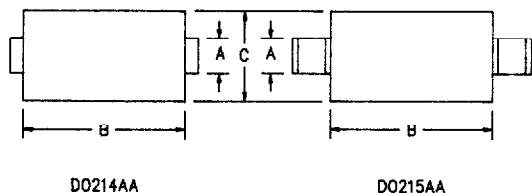
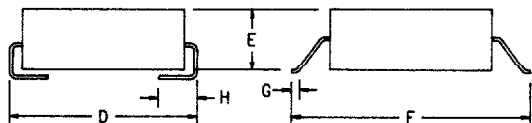


Ultra Fast Recovery Rectifiers

UFS105, 110, 115, 120



Dim.	Inches		Millimeter	
	Minimum	Maximum	Minimum	Maximum Notes
A	.081	.087	2.06	2.21
B	.160	.180	4.06	4.57
C	.130	.155	3.30	3.94
D	.205	.220	5.21	5.59
E	.075	.095	1.90	2.41
F	.270	.290	6.86	7.37
G	.015	.030	.381	.762
H	.030	.060	.760	1.52



D

Microsemi Catalog Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage
*UFS105	50V	50V
*UFS110	100V	100V
*UFS115	150V	150V
*UFS120	200V	200V

*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
- 1 Amp Current Rating
- t_{RR} 30ns Max.

Electrical Characteristics

Average forward current	$I_F(AV)$ 1.0 Amps	$T_A = 140^\circ C$, Square wave, $R_{\theta JL} = 30^\circ C/W$
Maximum surge current	I_{FSM} 35 Amps	8.3ms, half sine, $T_J = 175^\circ C$
Max peak forward voltage	V_{FM} .75 Volts	$I_{FM} = 0.1A; T_J = 25^\circ C^*$
Max peak forward voltage	V_{FM} .95 Volts	$I_{FM} = 1.0A; T_J = 25^\circ C^*$
Max reverse recovery time	t_{RR} 30 ns	1/2A, 1A, 1/4A, $T_J = 25^\circ C$
Typical reverse recovery time	t_{RR} 12 ns	1/2A, 1A, 1/4A, $T_J = 25^\circ C$
Max peak reverse current	I_{RM} 5 μA	$V_{RRM}, T_J = 25^\circ C$
Typical junction capacitance	C_J 10 pF	$V_R = 10V, T_J = 25^\circ C$

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

Thermal and Thermal Characteristics

Storage temperature range	T_{STC}	$-40^\circ C$ to $175^\circ C$
Operating junction temp range	T_J	$-40^\circ C$ to $175^\circ C$
Maximum thermal resistance	$R_{\theta JC}$	$30^\circ C/W$ Junction to Case
Weight		.0047 ounces (.013 grams) typical

Microsemi Corp.
Colorado

PH: 303-469-2161
FAX: 303-460-3775

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UFS105, 110, 115, 120

Figure 1
Typical Forward Characteristics

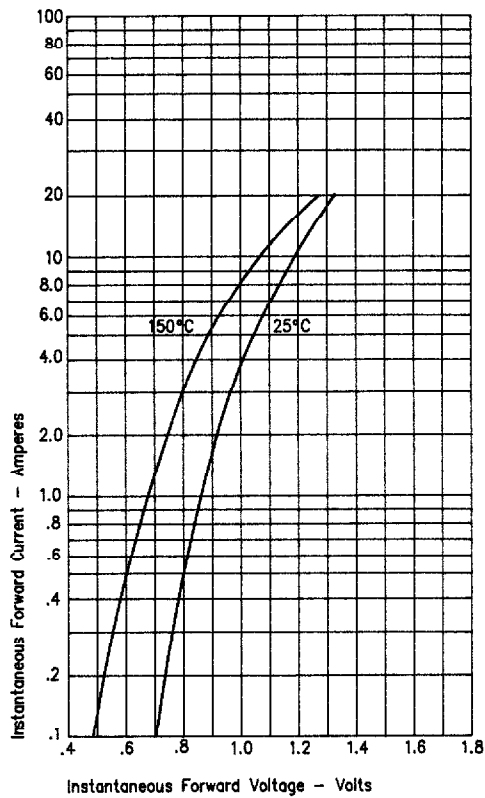


Figure 3
Typical Junction Capacitance

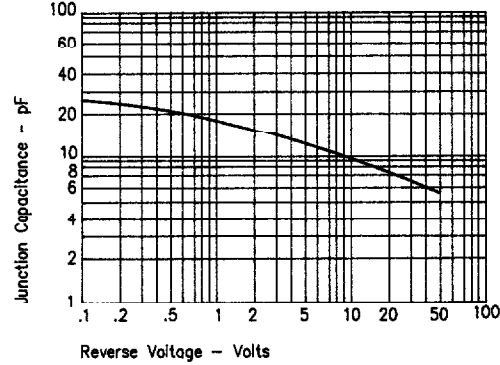
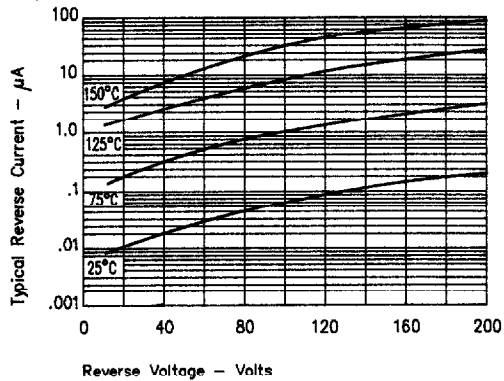


Figure 2
Typical Reverse Characteristics



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