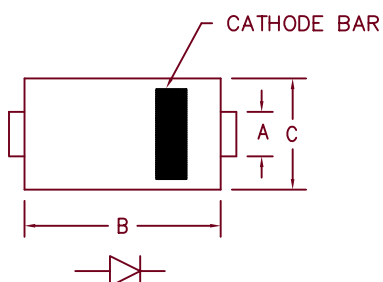
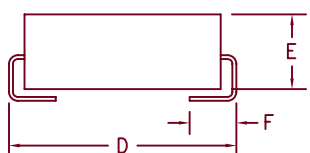


Ultra Fast Recovery Rectifiers

UFS105J – UFS120J



Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	.073	.087	1.85	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	.130	1.91	3.30	
F	.030	.060	.760	1.52	



D0-214BA Package

Microsemi Catalog Number	Industry Part Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage	• Ultra Fast Recovery • 175°C Junction Temperature • VRRM 50 to 200 Volts • 1 Amp Current Rating • ^tRR 30ns Max.
UFS105J	ER1A	50V	50V	
UFS110J	ER1B	100V	100V	
UFS115J		150V	150V	
UFS120J	ER1D MURS120T3	200V	200V	

Electrical Characteristics

Average forward current	I _{F(AV)} 1.0 Amps	T _L = 145°C, Square wave, R _{θJL} = 15°C/W
Maximum surge current	I _{FSM} 35 Amps	8.3ms, half sine, T _J = 175°C
Max peak forward voltage	V _{FM} .75 Volts	I _{FM} = 0.1A: T _J = 25°C*
Max peak forward voltage	V _{FM} .95 Volts	I _{FM} = 1.0A: T _J = 25°C*
Max reverse recovery time	^t RR 30 ns	1/2A, 1A, 1/4A, T _J = 25°C
Max peak reverse current	I _{RM} 5 μA	V _{RRM} , T _J = 25°C
Typical junction capacitance	C _J 10 pF	V _R = 10V, T _J = 25°C

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

Thermal and Mechanical Characteristics

Storage temperature range	T _{STG}	-55°C to 175°C
Operating junction temp range	T _J	-55°C to 175°C
Maximum thermal resistance	R _{θJL}	15°C/W Junction to lead
Weight		.0047 ounces (.013 grams) typical



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05-08-07 Rev. 6

UFS105J — UFS120J

Figure 1
Typical Forward Characteristics

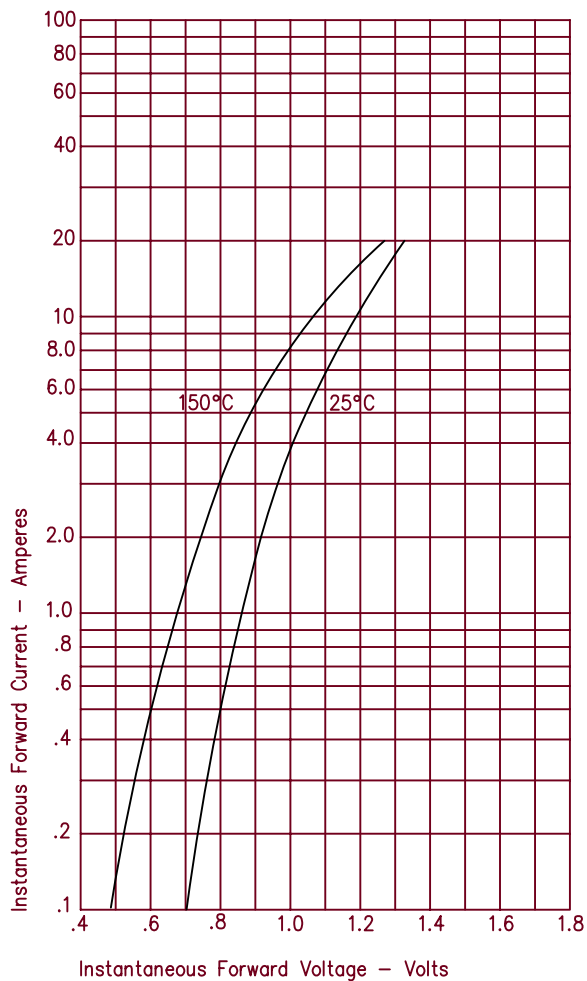


Figure 3
Typical Junction Capacitance

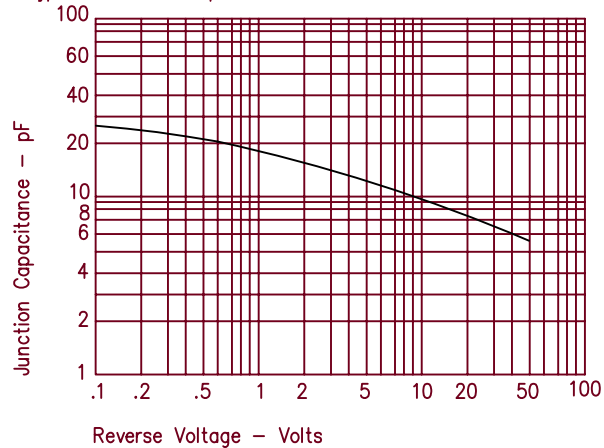


Figure 2
Typical Reverse Characteristics

