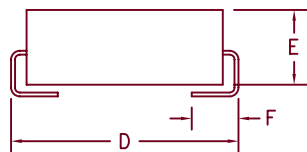
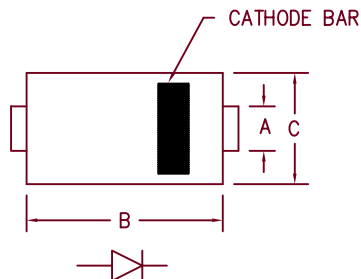


Ultra Fast Recovery Rectifiers

UFS160J — UFS180J



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
UFS160J	ER1J MURS160T3	600V	600V
UFS170J		700V	700V
UFS180J	ER1K	800V	800V

- Ultra Fast Recovery
- 175°C Junction Temperature
- VRRM 600 to 800 Volts
- 1 Amp Current Rating
- ^tRR 60nS Max.

Electrical Characteristics

Average forward current	I _{F(AV)} 1.0 Amps	T _L = 140°C, Square wave, R _{θJL} = 15°C/W
Maximum surge current	I _{FSM} 25 Amps	8.3ms, half sine, T _J = 175°C
Max peak forward voltage	V _{FM} .89 Volts	I _{FM} = 0.1A; T _J = 25°C*
Max peak forward voltage	V _{FM} 1.2 Volts	I _{FM} = 1.0A; T _J = 25°C*
Max reverse recovery time	^t RR 60 nS	1/2A, 1A, 1/4A, T _J = 25°C
Max peak reverse current	I _{RM} 20 μA	V _{RRM} , T _J = 25°C
Typical junction capacitance	C _J 5.5 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. 3

UFS160J — UFS180J

Figure 1
Typical Forward Characteristics

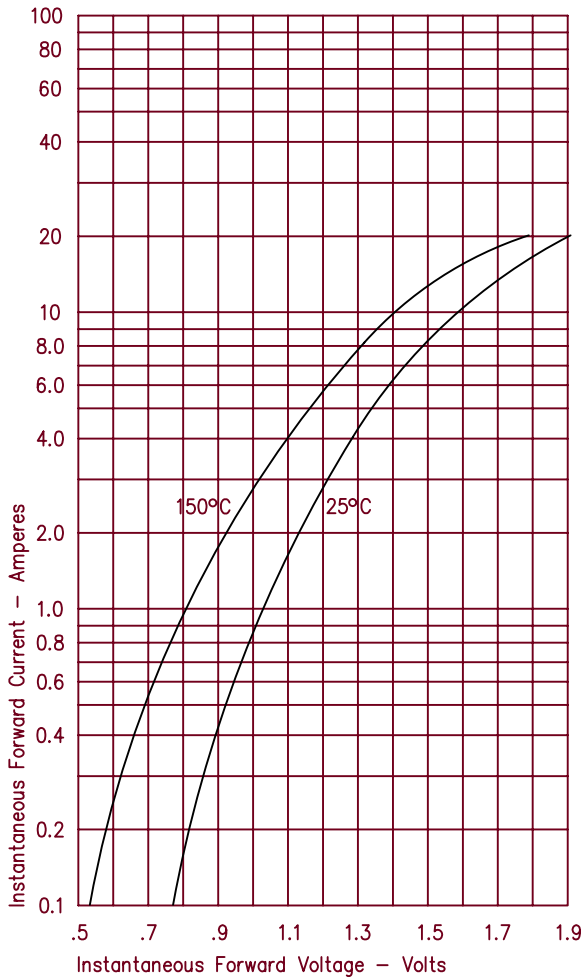


Figure 3
Typical Junction Capacitance

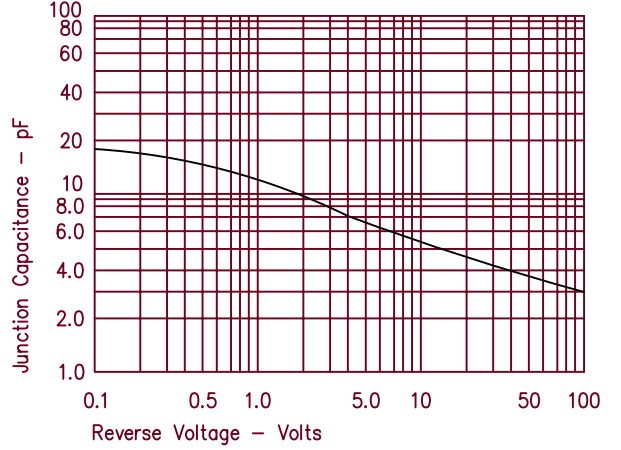


Figure 2
Typical Reverse Characteristics

