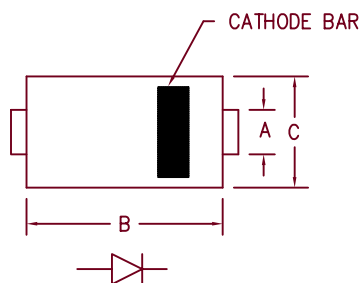
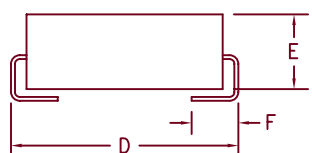


# Ultra Fast Recovery Rectifiers

## 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	<ul style="list-style-type: none"> <li>• Ultra Fast Recovery</li> <li>• 175°C Junction Temperature</li> <li>• VRRM 600 to 800 Volts</li> <li>• 1 Amp Current Rating</li> <li>• <sup>t</sup>RR 60nS Max.</li> </ul>
UFS160J	ER1J MURS160T3	600V	600V	
UFS170J		700V	700V	
UFS180J	ER1K	800V	800V	

### Electrical Characteristics

Average forward current	I <sub>F(AV)</sub> 1.0 Amps	T <sub>L</sub> = 140°C, Square wave, R <sub>θJL</sub> = 15°C/W
Maximum surge current	I <sub>FSM</sub> 25 Amps	8.3ms, half sine, T <sub>J</sub> = 175°C
Max peak forward voltage	V <sub>FM</sub> .89 Volts	I <sub>FM</sub> = 0.1A: T <sub>J</sub> = 25°C*
Max peak forward voltage	V <sub>FM</sub> 1.2 Volts	I <sub>FM</sub> = 1.0A: T <sub>J</sub> = 25°C*
Max reverse recovery time	<sup>t</sup> RR 60 nS	1/2A, 1A, 1/4A, T <sub>J</sub> = 25°C
Max peak reverse current	I <sub>RM</sub> 20 μA	V <sub>RRM</sub> , T <sub>J</sub> = 25°C
Typical junction capacitance	C <sub>J</sub> 5.5 pF	V <sub>R</sub> = 10V, T <sub>J</sub> = 25°C

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

### Thermal and Mechanical Characteristics

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



SCOTTSDALE

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

# UFS160J — UFS180J

Figure 1  
Typical Forward Characteristics

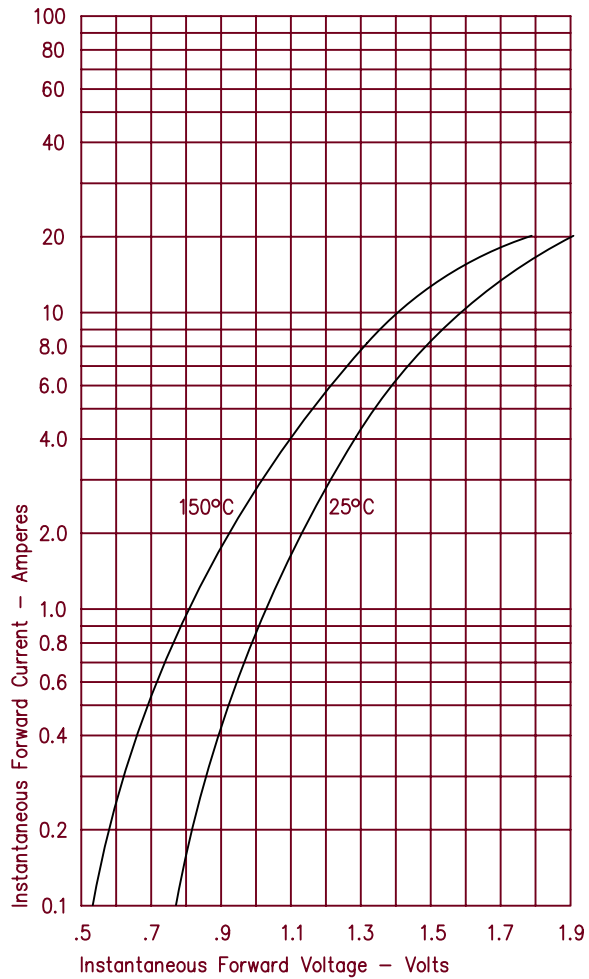


Figure 3  
Typical Junction Capacitance

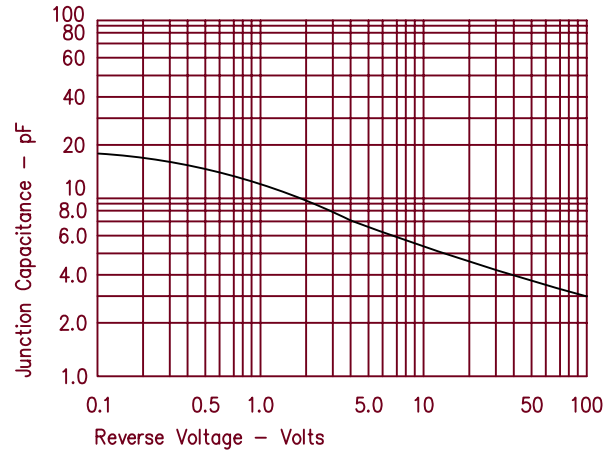
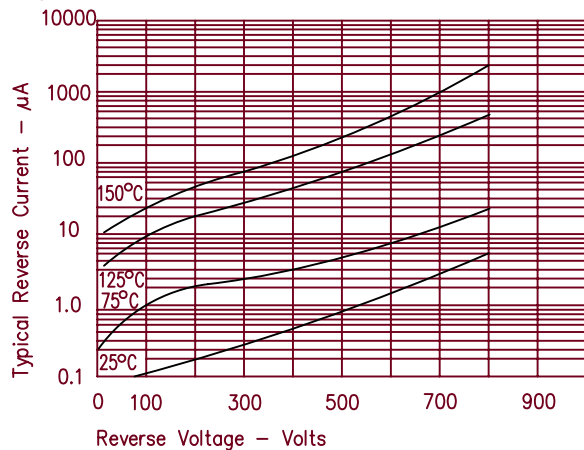


Figure 2  
Typical Reverse Characteristics



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