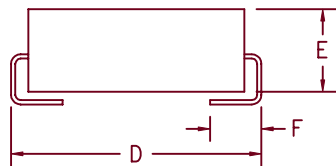
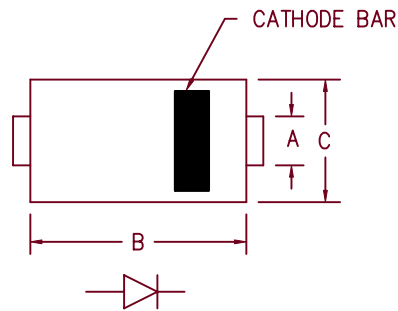


Ultra Fast Recovery Rectifiers

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	

DO-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
- t_{RR} 60nS Max.

Electrical Characteristics

Average forward current	$I_F(AV)$ 1.0 Amps	$T_L = 140^\circ\text{C}$, Square wave, $R_{\theta JL} = 15^\circ\text{C/W}$
Maximum surge current	I_{FSM} 25 Amps	8.3ms, half sine, $T_J = 175^\circ\text{C}$
Max peak forward voltage	V_{FM} .89 Volts	$I_{FM} = 0.1\text{A}; T_J = 25^\circ\text{C}^*$
Max peak forward voltage	V_{FM} 1.2 Volts	$I_{FM} = 1.0\text{A}; T_J = 25^\circ\text{C}^*$
Max reverse recovery time	t_{RR} 60 nS	1/2A, 1A, 1/4A, $T_J = 25^\circ\text{C}$
Max peak reverse current	I_{RM} 20 μA	$V_{RRM}, T_J = 25^\circ\text{C}$
Typical junction capacitance	C_J 5.5 pF	$V_R = 10\text{V}, T_J = 25^\circ\text{C}$

*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	$R_{\theta JL}$	15°C/W Junction to lead
Weight		.0047 ounces (.013 grams) typical

10-2-01 Rev. 2

UFS160J — UFS180J

Figure 1
Typical Forward Characteristics

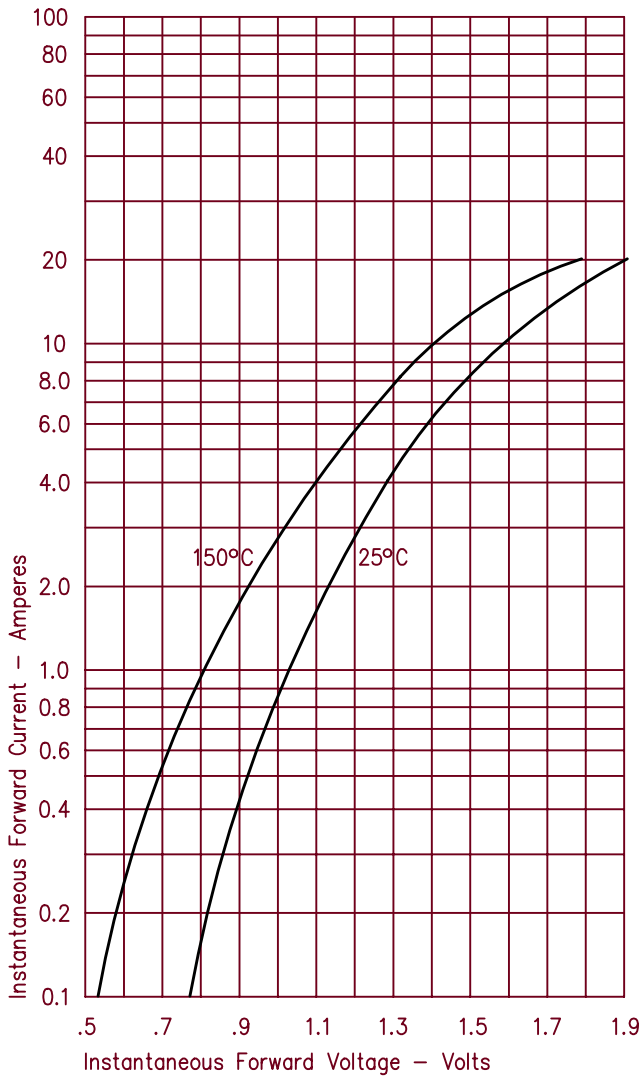


Figure 3
Typical Junction Capacitance

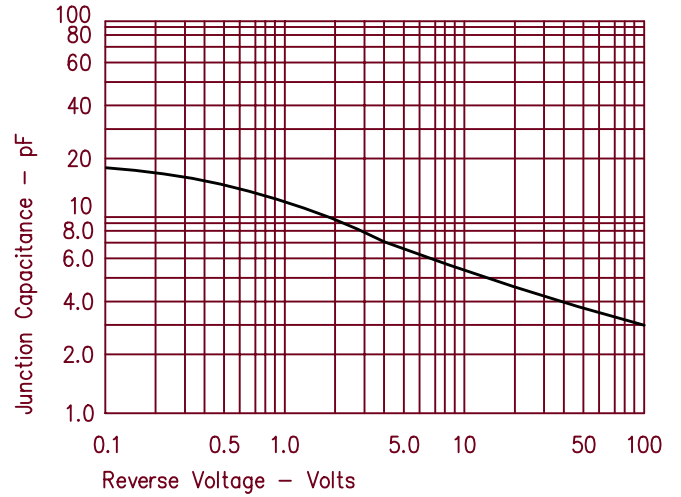


Figure 2
Typical Reverse Characteristics

