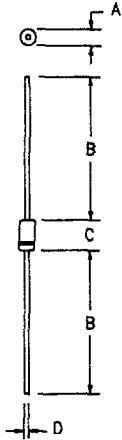


Ultra Fast Recovery Rectifiers UF160, UF170, UF180



Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	.081	.107	2.057	2.718	Dia.
B	1.10	---	27.94	---	
C	.160	.205	4.064	5.207	
D	.028	.034	.711	.864	Dia.



PLASTIC DO41

Microsemi Catalog Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage	
UF160	600V	600V	<ul style="list-style-type: none"> • Ultra Fast Recovery • 175°C Junction Temperature • VRRM 600 to 800 Volts • 1 Amp Current Rating • t_{RR} 60nS Max.
UF170	700V	700V	
UF180	800V	800V	

Electrical Characteristics		
Average forward current	I _{F(AV)} 1.0 Amps	T _A = 110°C, Square wave, R _{θJL} = 50°C/W, L = 0"
Average forward current	I _{F(AV)} 1.0 Amps	T _A = 90°C, Square wave, R _{θJL} = 68°C/W = 3/8"
Maximum surge current	I _{SM} 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
Typical reverse recovery time	t _{RR} 45 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}	-40°C to 175°C
Operating junction temp range	T _J	-40°C to 175°C
Maximum thermal resistance	L = 3/8" R _{θJL}	68°C/W Junction to Lead
	L = 0 R _{θJL}	50°C/W Junction to Lead
Weight		.011 ounces (0.34 grams) typical

PH: 303-469-2161
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Microsemi Corp.
Colorado

D-27

UF160, UF170, UF180

Figure 1
Typical Forward Characteristics

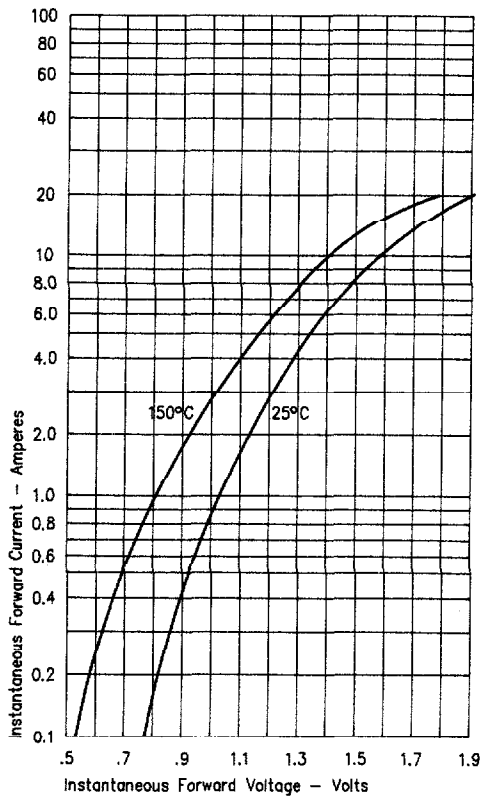


Figure 3
Typical Junction Capacitance

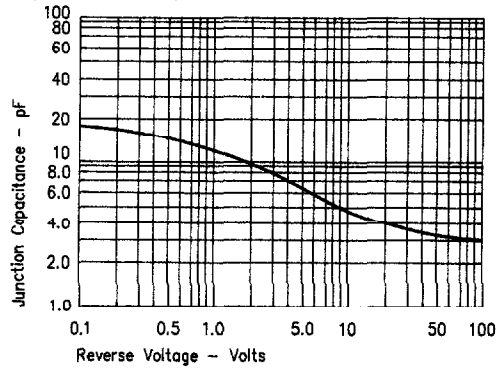


Figure 2
Typical Reverse Characteristics

