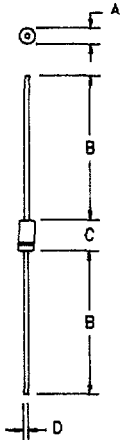


# Ultra Fast Recovery Rectifiers

## UF105, 110, 115, 120



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	
UF105	50V	50V	<ul style="list-style-type: none"> <li>• Ultra Fast Recovery</li> <li>• 175°C Junction Temperature</li> <li>• VRRM 50 to 200 Volts</li> <li>• 1 Amp Current Rating</li> <li>• <sup>t</sup>RR 30ns Max.</li> </ul>
UF110	100V	100V	
UF115	150V	150V	
UF120	200V	200V	

Electrical Characteristics		
Average forward current	I <sub>F(AV)</sub> 1.0 Amps	T <sub>A</sub> = 135°C, Square wave, R <sub>θJL</sub> = 35°C/W, L = 0"
Average forward current	I <sub>F(AV)</sub> 1.0 Amps	T <sub>A</sub> = 115°C, Square wave, R <sub>θJL</sub> = 60°C/W, L = 3/8"
Maximum surge current	I <sub>FSM</sub> 35 Ampe	8.3ms, half sine, T <sub>J</sub> = 175°C
Max peak forward voltage	V <sub>FM</sub> .75 Volts	I <sub>FM</sub> = 0.1A; T <sub>J</sub> = 25°C*
Max peak forward voltage	V <sub>FM</sub> .95 Volts	I <sub>FM</sub> = 1.0A; T <sub>J</sub> = 25°C*
Max reverse recovery time	<sup>t</sup> RR 30 ns	1/2A, 1A, 1/4A, T <sub>J</sub> = 25°C
Typical reverse recovery time	<sup>t</sup> RR 12 ns	1/2A, 1A, 1/4A, T <sub>J</sub> = 25°C
Max peak reverse current	I <sub>RM</sub> 5 μA	V <sub>RRM</sub> , T <sub>J</sub> = 25°C
Typical junction capacitance	C <sub>J</sub> 10 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>	-40°C to 175°C
Operating junction temp range	T <sub>J</sub>	-40°C to 175°C
Maximum thermal resistance	L = 3/8" R <sub>θJL</sub>	60°C/W Junction to Lead
	L = 0 R <sub>θJL</sub>	35°C/W Junction to Lead
Weight		.011 ounces (0.34 grams) typical

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**Colorado**

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# UF105, 110, 115, 120

Figure 1  
Typical Forward Characteristics

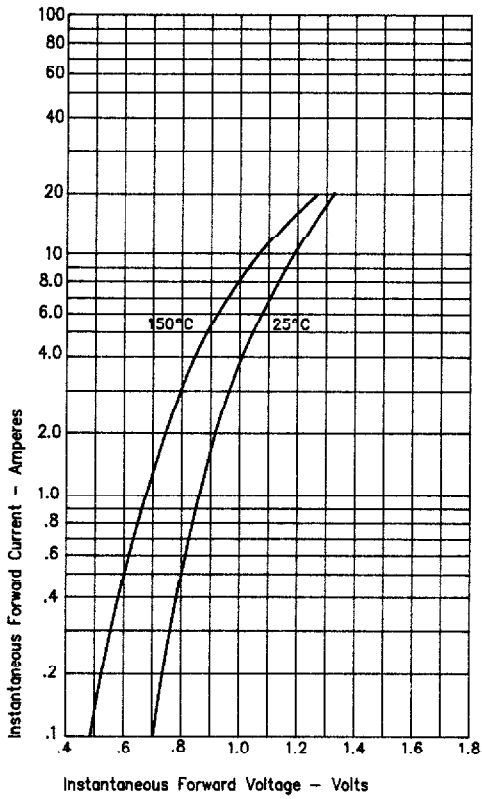


Figure 3  
Typical Junction Capacitance

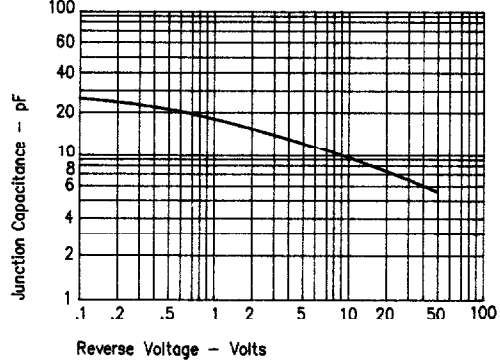


Figure 2  
Typical Reverse Characteristics

