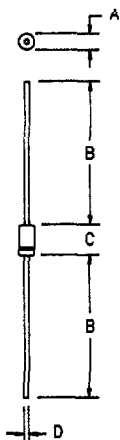


Ultra Fast Recovery Rectifiers

UF505, 510, 515, 520



Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	.188	.260	4.78	6.50	Dia.
B	1.00	---	25.4	---	
C	.285	.375	7.24	9.52	
D	.046	.056	1.17	1.42	Dia.



PLASTIC D0201AD

Microsemi Catalog Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage	
UF505	50V	50V	<ul style="list-style-type: none"> • Ultra Fast Recovery • 175°C Junction Temperature • VRRM 50 to 200 Volts • 5 Amp Current Rating • t_{RR} 30 ns Max.
UF510	100V	100V	
UF515	150V	150V	
UF520	200V	200V	

Electrical Characteristics		
Average forward current	$I_F(AV)$ 5.0 Amps	$T_A = 122^\circ\text{C}$, Square wave, $R_{\theta JL} = 11^\circ\text{C/W}$, $L = 1/8"$
Average forward current	$I_F(AV)$ 5.0 Amps	$T_A = 105^\circ\text{C}$, Square wave, $R_{\theta JL} = 14.7^\circ\text{C/W}$, $L = 3/8"$
Maximum surge current	I_{FSM} 175 Amps	8.3ms, half sine, $T_J = 175^\circ\text{C}$
Max peak forward voltage	VFM .95 Volts	$I_{FM} = 5.0A$; $T_J = 25^\circ\text{C}$
Max reverse recovery time	t_{RR} 30 ns	$1/2A, 1A, 1/4A, T_J = 25^\circ\text{C}$
Typical reverse recovery time	t_{RR} 20 ns	$1/2A, 1A, 1/4A, T_J = 25^\circ\text{C}$
Max peak reverse current	I_{RM} 2 mA	$V_{RRM}, T_J = 150^\circ\text{C}$
Max peak reverse current	I_{RM} 10 μA	$V_{RRM}, T_J = 25^\circ\text{C}$
Typical junction capacitance	C_J 58 pF	$V_R = 10V, T_J = 25^\circ\text{C}$
*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	$L = 1/8"$ $R_{\theta JL}$	11°C/W Junction to Lead
	$L = 3/8"$ $R_{\theta JL}$	14.7°C/W Junction to Lead
Weight		.011 ounces (0.34 grams) typical

UF505, 510, 515, 520

Figure 1
Typical Forward Characteristics

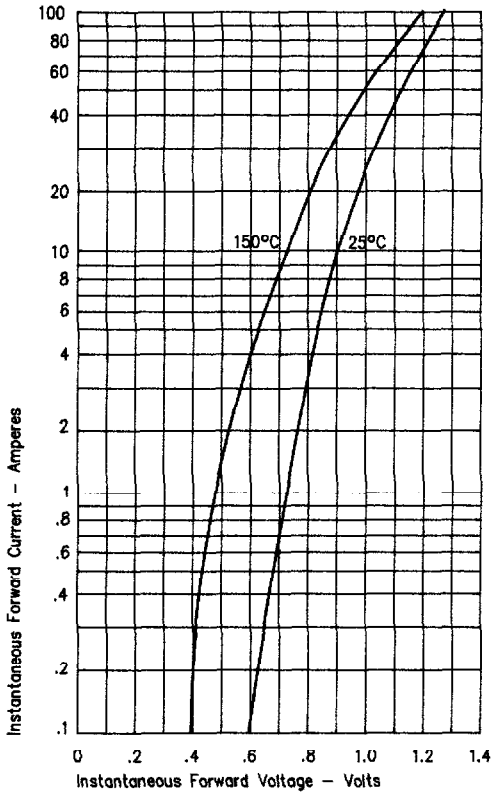


Figure 3
Typical Junction Capacitance

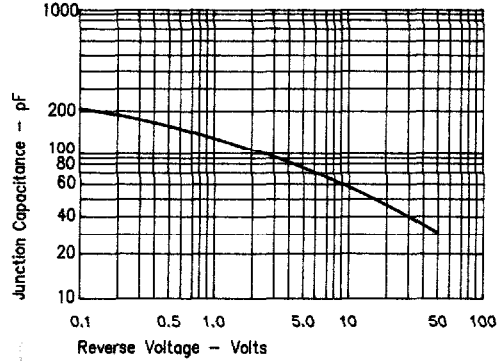


Figure 2
Typical Reverse Characteristics

