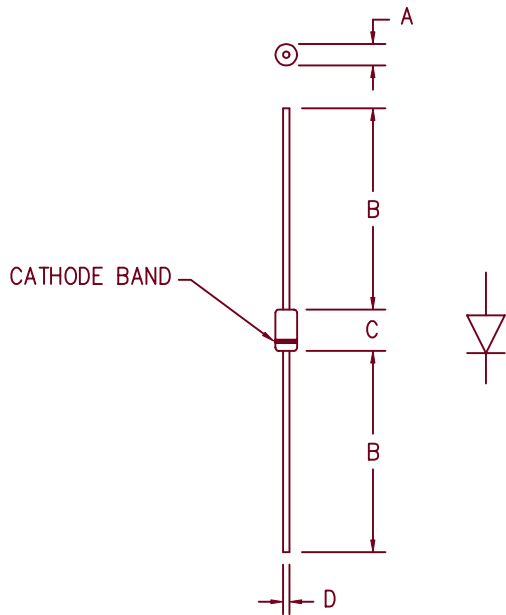


Ultra Fast Recovery Rectifiers

UF510 — UF520



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
UF510	100V	100V
UF515	150V	150V
UF520	200V	200V

- Ultra Fast Recovery
- 175°C Junction Temperature
- VRRM 100 to 200 Volts
- 5 Amp Current Rating
- t_{RR} 30 ns Max.

Electrical Characteristics		
Average forward current	I _{F(AV)} 5.0 Amps	T _A = 122°C, Square wave, R _{θJL} = 11°C/W, L = 1/8"
Average forward current	I _{F(AV)} 5.0 Amps	T _A = 105°C, Square wave, R _{θJL} = 14.7°C/W, L = 3/8"
Maximum surge current	I _{FSM} 175 Amps	8.3ms, half sine, T _J = 175°C
Max peak forward voltage	V _{FM} .95 Volts	I _{FM} = 5.0A; T _J = 25°C*
Max reverse recovery time	t _{RR} 30 ns	1/2A, 1A, 1/4A, T _J = 25°C
Max peak reverse current	I _{RM} 10 μA	V _{RRM} , T _J = 25°C
Typical junction capacitance	C _J 58 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}	-55°C to 175°C
Operating junction temp range	T _J	-55°C to 175°C
Maximum thermal resistance	L = 1/8" R _{θJL}	11°C/W Junction to Lead
	L = 3/8" R _{θJL}	14.7°C/W Junction to Lead
Weight		.011 ounces (0.34 grams) typical

7-14-00 Rev. 1

UF510 – UF520

Figure 1
Typical Forward Characteristics

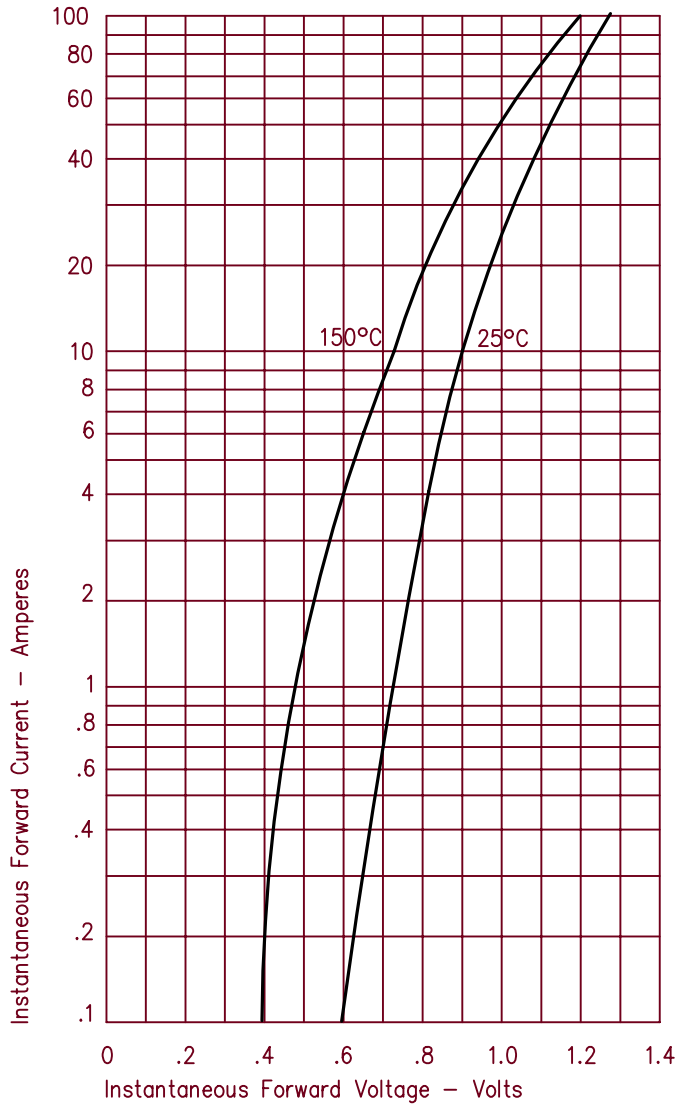


Figure 3
Typical Junction Capacitance

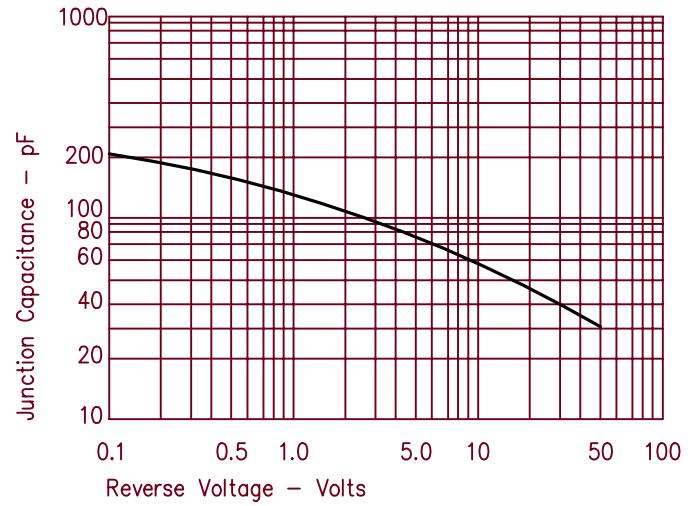


Figure 2
Typical Reverse Characteristics

