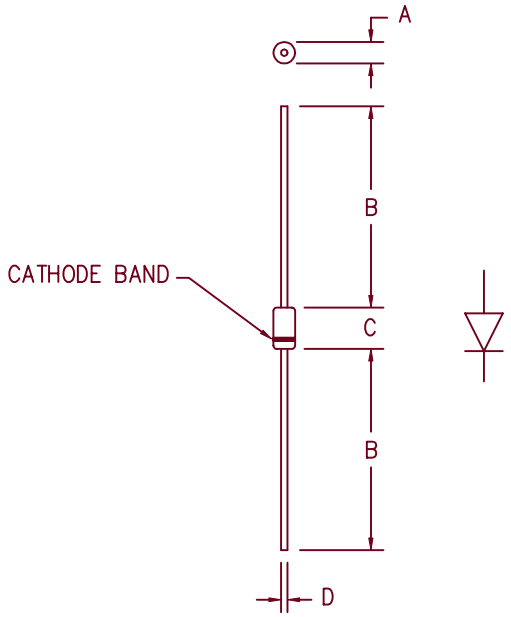
Ultra Fast Recovery Rectifiers

UF310 – UF320



Dim.	Inches		Millimeter		
	Minimum	Maximum	Minimum	Maximum	Notes
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
UF310	100V	100V
UF315	150V	150V
UF320	200V	200V

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

Electrical Characteristics

Average forward current	$I_{F(AV)}$ 3.0 Amps	T_A = 126°C, Square wave, $R_{\theta JL}$ = 17°C/W, L = 1/8"
Average forward current	$I_{F(AV)}$ 3.0 Amps	T_A = 109°C, Square wave, $R_{\theta JL}$ = 23°C/W = 3/8"
Maximum surge current	I_{FSM} 100 Amps	8.3ms, half sine, T_J = 175°C
Max peak forward voltage	V_{FM} .95 Volts	I_{FM} = 3.0A; 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 38 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" $R_{\theta JL}$	17°C/W Junction to Lead
	L = 3/8" $R_{\theta JL}$	23°C/W Junction to Lead
Weight		.011 ounces (0.34 grams) typical

7–18–00 Rev. 1

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Figure 1
Typical Forward Characteristics

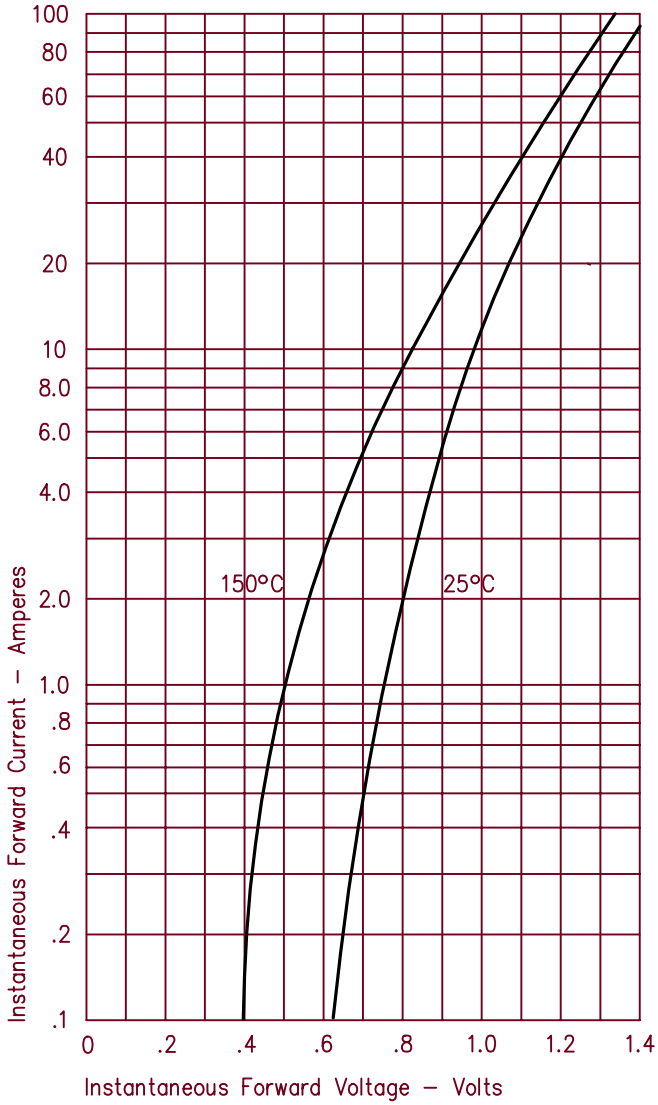

Figure 2
Typical Reverse Characteristics

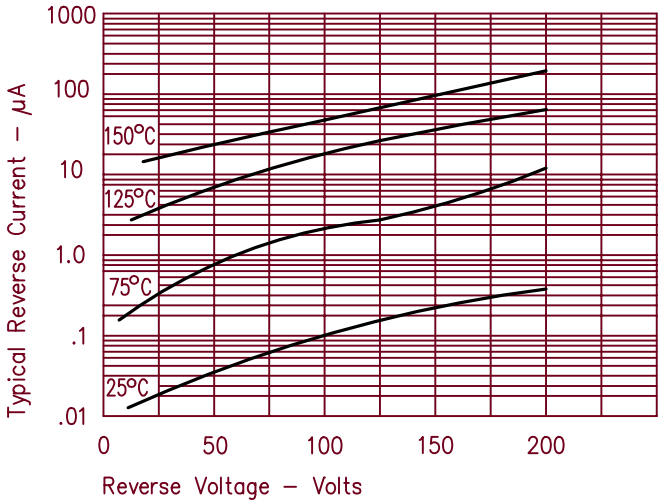

Figure 3
Typical Junction Capacitance