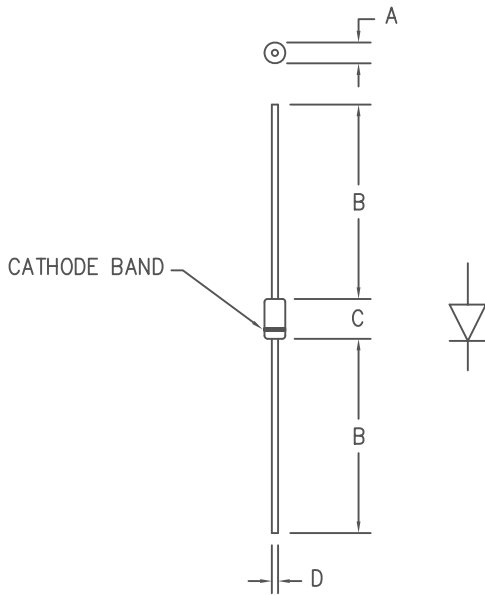


# Ultra Fast Recovery Rectifiers UF110 — UF120



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 D041

Microsemi Catalog Number	Industry Part Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage
UF110	UF4001, UF4001GP	50V	50V
	VHE205		
	MUR110	100V	100V
UF115	UF4002, UF4002GP		
	VHE210		
	MUR115	150V	150V
UF120	VHE215		
	MUR120	200V	200V
	UF4003, UF4003GP		
	VHE220		

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

## Electrical Characteristics

Average forward current	$I_{F(AV)}$ 1.0 Amps	$T_L = 135^\circ\text{C}$ , Square wave, $R_{\theta JL} = 25^\circ\text{C/W}$ , $L = 1/4"$
Maximum surge current	$I_{FSM}$ 35 Amps	8.3ms, half sine, $T_J = 175^\circ\text{C}$
Max peak forward voltage	$V_{FM}$ .75 Volts	$I_{FM} = 0.1\text{A}; T_J = 25^\circ\text{C}^*$
Max peak forward voltage	$V_{FM}$ .95 Volts	$I_{FM} = 1.0\text{A}; T_J = 25^\circ\text{C}^*$
Max reverse recovery time	$t_{RR}$ 30 ns	1/2A, 1A, 1/4A, $T_J = 25^\circ\text{C}$
Max peak reverse current	$I_{RM}$ 5 $\mu\text{A}$	$V_{RRM}, T_J = 25^\circ\text{C}$
Typical junction capacitance	$C_J$ 10 pF	$V_R = 10\text{V}, T_J = 25^\circ\text{C}$

\*Pulse test: Pulse width 300  $\mu\text{sec}$ , 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	$L = 1/4"$ $R_{\theta JL}$	25°C/W Junction to Lead
Weight		.011 ounces (0.34 grams) typical



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05-04-07 Rev. 4

# UF110 — UF120

Figure 1  
Typical Forward Characteristics

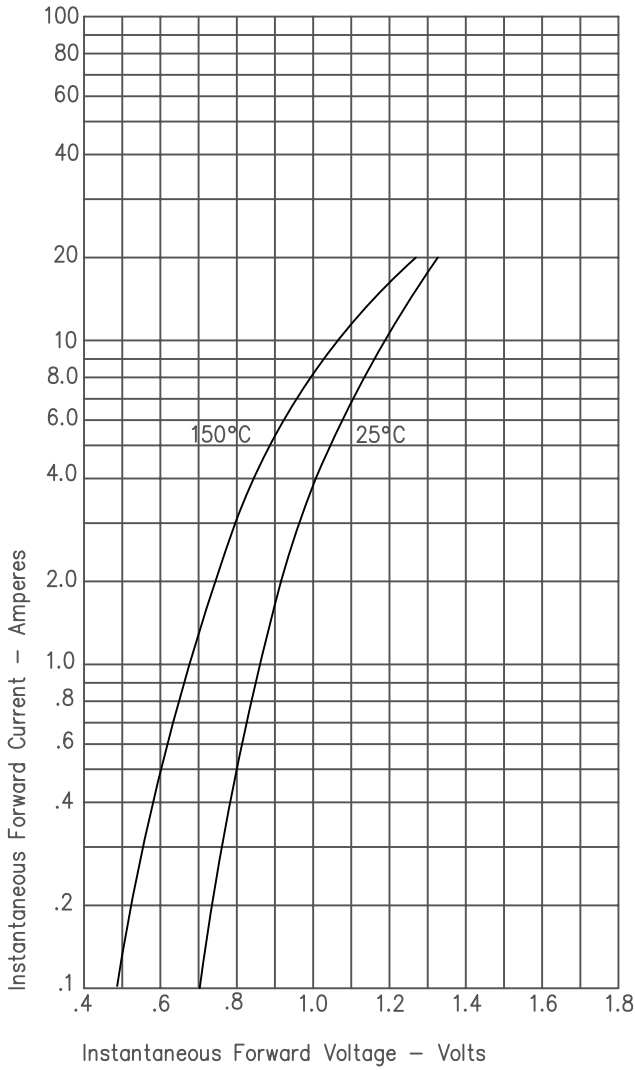


Figure 3  
Typical Junction Capacitance

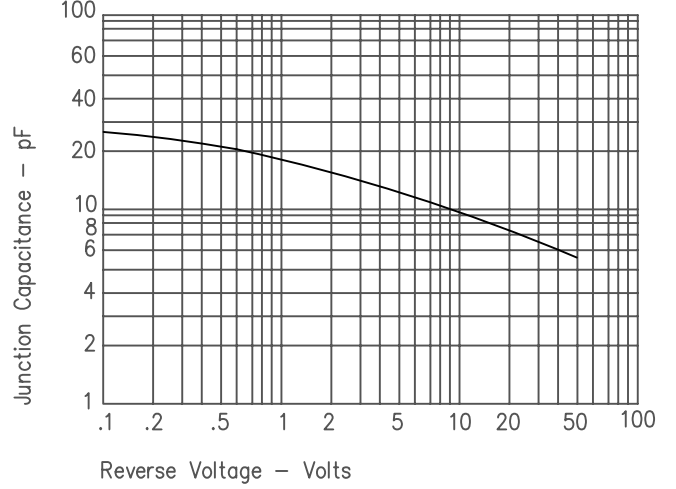


Figure 2  
Typical Reverse Characteristics

