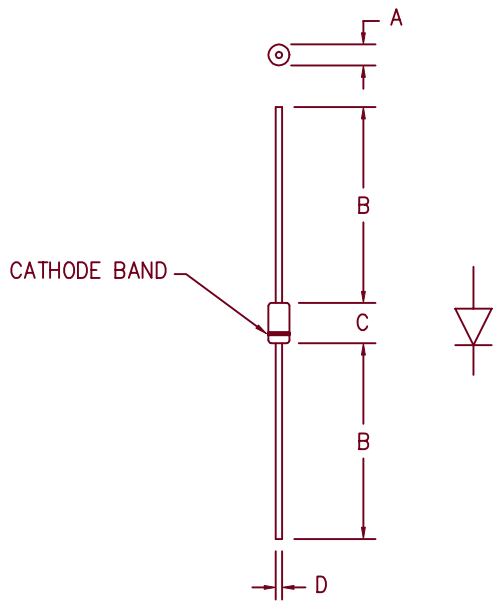


# Ultra Fast Recovery Rectifiers UF130 — UF150



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
UF130	VHE230	300V	300V
UF140	UF4004	400V	400V
	UF4004GP		
	VHE240		
UF150	VHE250	500V	500V

- Ultra Fast Recovery
- 175°C Junction Temperature
- VRRM 300 to 500 Volts
- 1 Amp Current Rating
- $t_{RR}$  50nS Max.

## Electrical Characteristics

Average forward current	$I_F(AV)$ 1.0 Amps	$T_L = 120^\circ C$ , Square wave, $R_{\theta JL} = 15^\circ C/W$ , $L = 1/4"$
Maximum surge current	$I_{FSM}$ 30 Amps	8.3ms, half sine, $T_J = 175^\circ C$
Max peak forward voltage	$V_{FM}$ .80 Volts	$I_{FM} = 0.1A; T_J = 25^\circ C^*$
Max peak forward voltage	$V_{FM}$ 1.1 Volts	$I_{FM} = 1.0A; T_J = 25^\circ C^*$
Max reverse recovery time	$t_{RR}$ 50 nS	1/2A, 1A, 1/4A, $T_J = 25^\circ C$
Max peak reverse current	$I_{RM}$ 10 $\mu A$	$V_{RRM}, T_J = 25^\circ C$
Typical junction capacitance	$C_J$ 2.5 pF	$V_R = 10V, T_J = 25^\circ C$

\*Pulse width = 300 usec. Duty cycle = 2%

## Thermal and Mechanical

Storage temperature range	$T_{STG}$	-55°C to 175°C
Operating junction temp range	$T_J$	-55°C to 175°C
Maximum thermal resistance	$L = 1/4"$ $R_{\theta JL}$	15°C/W Junction to Lead
Weight		.011 ounces (0.34 grams) typical

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# UF130 — UF150

Figure 1  
Typical Forward Characteristics

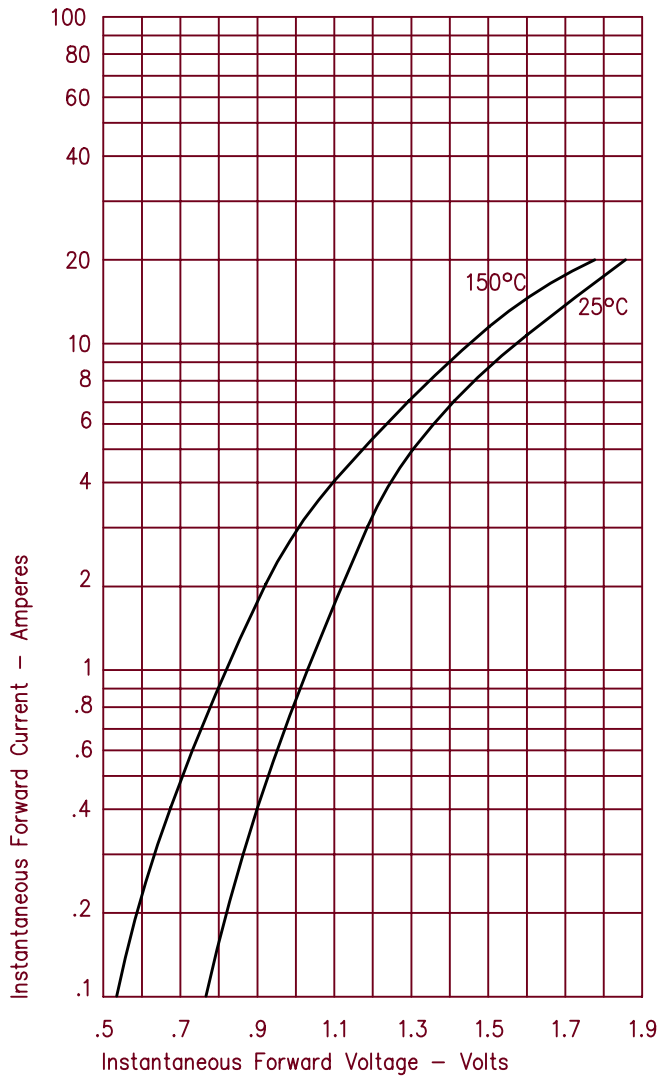


Figure 3  
Typical Junction Capacitance

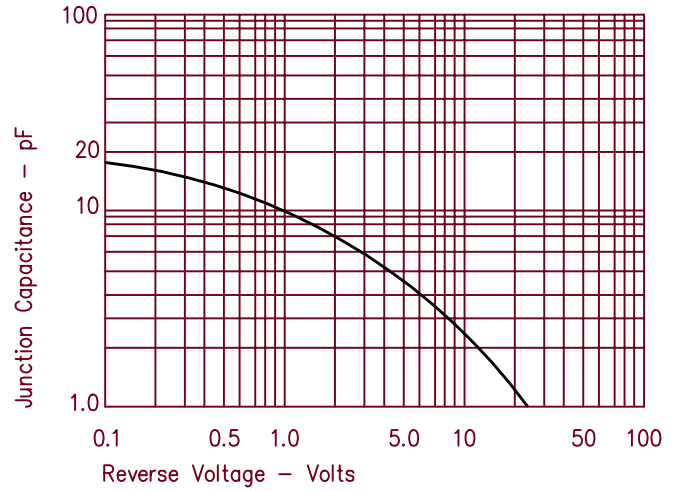


Figure 2  
Typical Reverse Characteristics

