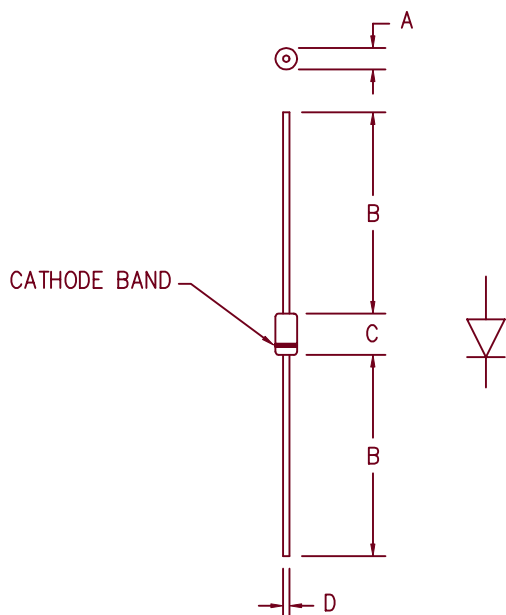


# Ultra Fast Recovery Rectifiers

## 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	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage
UF130	300V	300V
UF140	400V	400V
UF150	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	$T_A = 120^\circ\text{C}$ , Square wave, $R_{\theta JL} = 15^\circ\text{C/W}$ , $L = 1/4"$
Maximum surge current	$I_{FSM}$ 30 Amps	8.3ms, half sine, $T_J = 175^\circ\text{C}$
Max peak forward voltage	$V_{FM}$ .80 Volts	$I_{FM} = 0.1\text{A}; T_J = 25^\circ\text{C}^*$
Max peak forward voltage	$V_{FM}$ 1.1 Volts	$I_{FM} = 1.0\text{A}; T_J = 25^\circ\text{C}^*$
Max reverse recovery time	$t_{RR}$ 50 nS	1/2A, 1A, 1/4A, $T_J = 25^\circ\text{C}$
Max peak reverse current	$I_{RM}$ 10 $\mu\text{A}$	$V_{RRM}, T_J = 25^\circ\text{C}$
Typical junction capacitance	$C_J$ 2.5 pF	$V_R = 10\text{V}, T_J = 25^\circ\text{C}$

\*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

# UF130 – UF150

Figure 1  
Typical Forward Characteristics

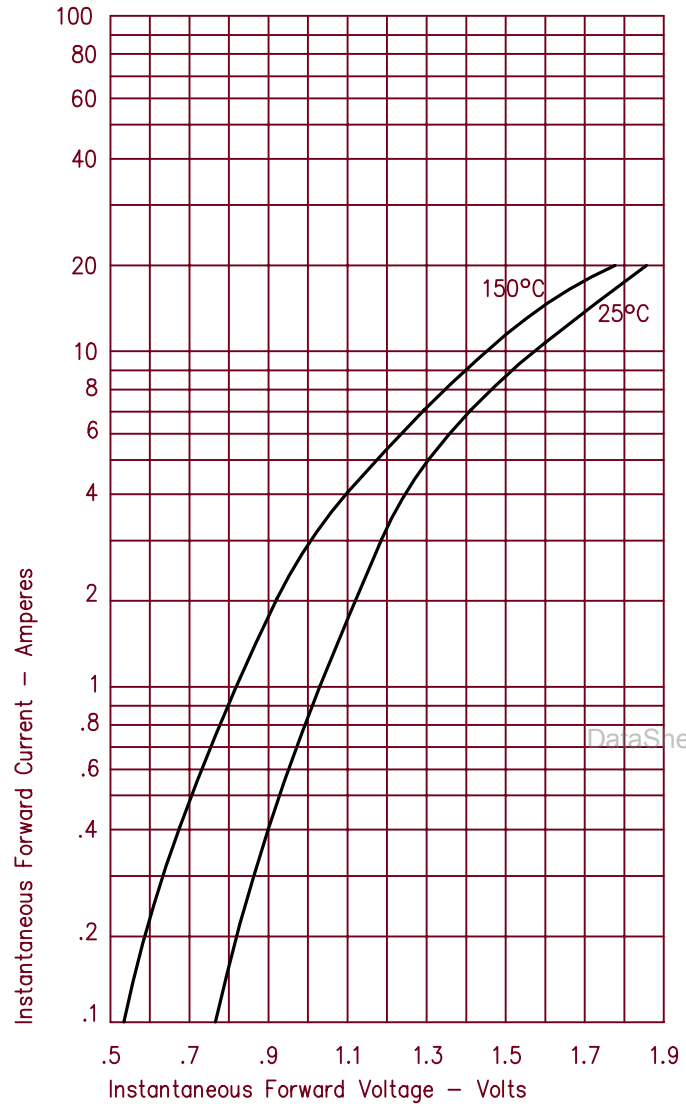


Figure 3  
Typical Junction Capacitance

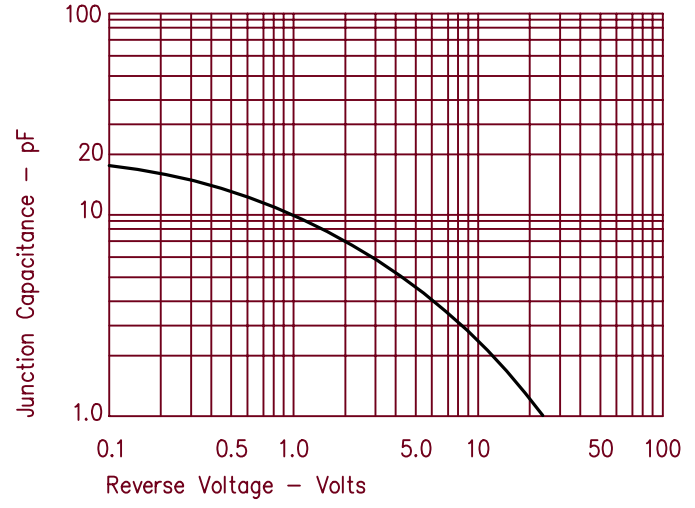


Figure 2  
Typical Reverse Characteristics

