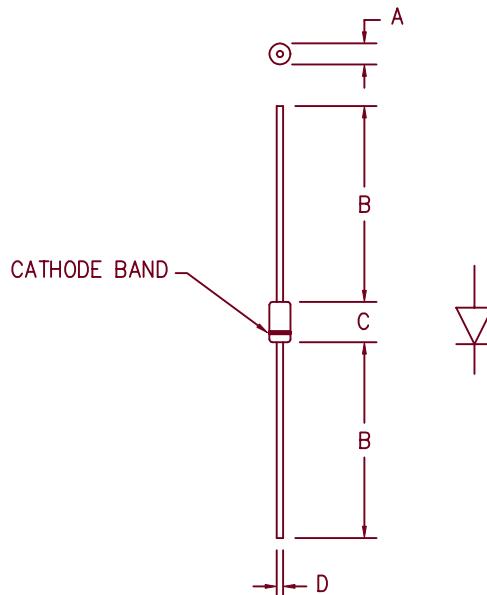


Ultra Fast Recovery Rectifiers

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 DO41

Microsemi Catalog Number	Industry Part Number	Working Reverse Voltage	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	$T_L = 120^\circ\text{C}$, Square wave, $R_{QJL} = 15^\circ\text{C}/W$, $L = 1/4"$
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	$I_{FM} = 0.1A; T_J = 25^\circ\text{C}$ *
Max peak forward voltage	V_{FM} 1.1 Volts	$I_{FM} = 1.0A; T_J = 25^\circ\text{C}$ *
Max reverse recovery time	t_{RR} 50 nS	1/2A, 1A, 1/4A, $T_J = 25^\circ\text{C}$
Max peak reverse current	I_{RRM} 10 μA	$V_{RRM}, T_J = 25^\circ\text{C}$
Typical junction capacitance	C_J 2.5 pF	$V_R = 10V, T_J = 25^\circ\text{C}$

*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_{QJL}	15°C/W Junction to Lead
Weight		.011 ounces (0.34 grams) typical

UF130 — UF150

Figure 1
Typical Forward Characteristics

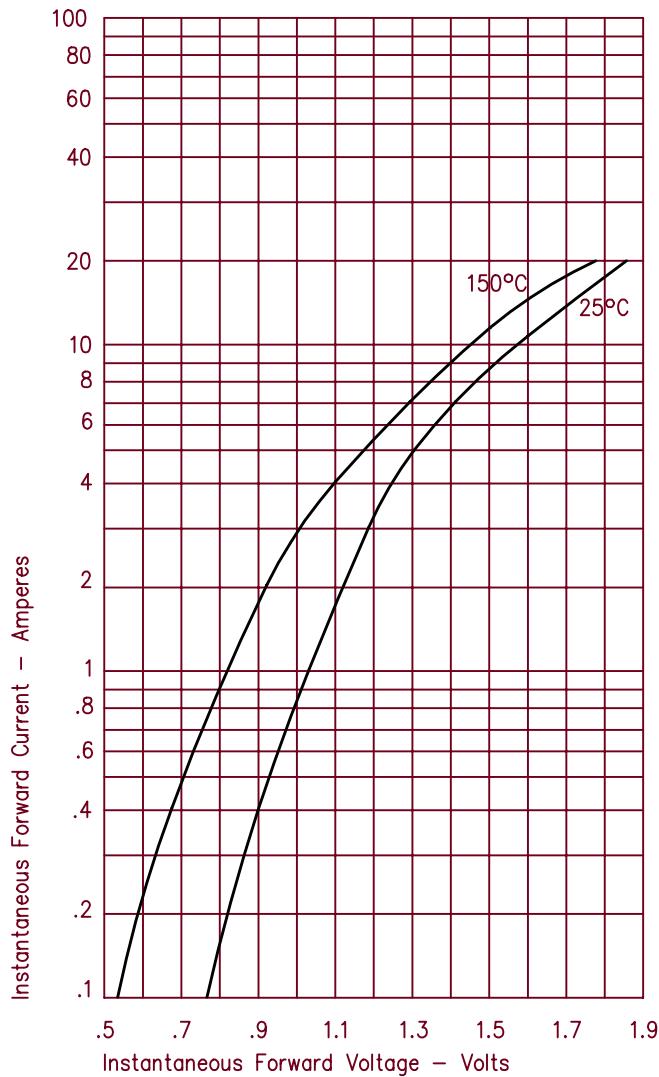


Figure 3
Typical Junction Capacitance

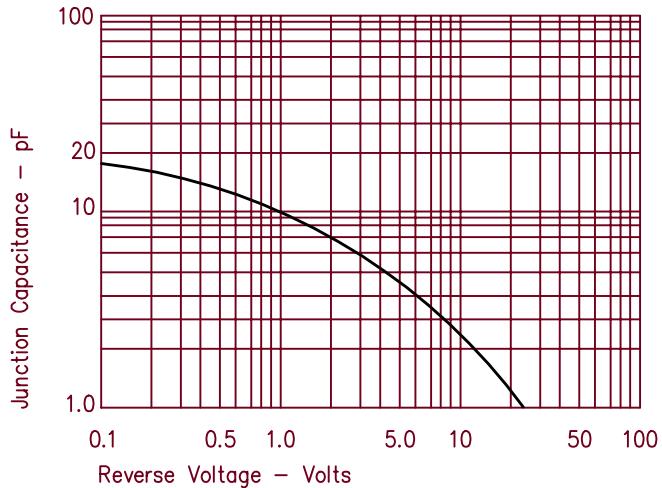


Figure 2
Typical Reverse Characteristics

