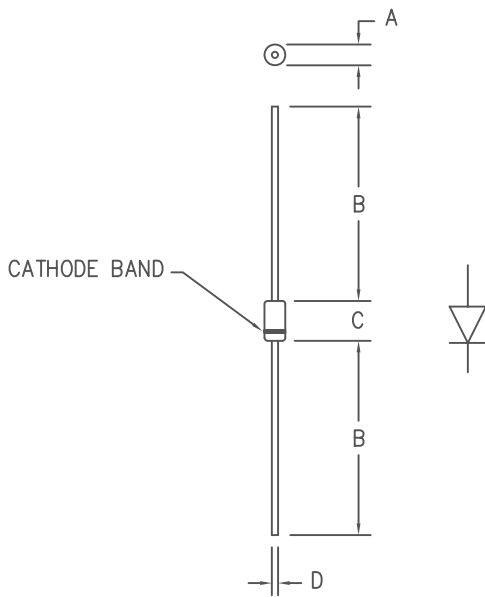


Ultra Fast Recovery Rectifiers UF130 — UF150



| 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 | $T_L = 125^\circ C$, Square wave, $R_{\theta JL} = 25^\circ C/W$, $L = 1/4"$ |
| 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 μA | $V_{RRM}, T_J = 25^\circ C$ |
| 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 | $L = 1/4"$ $R_{\theta JL}$ | 25°C/W Junction to Lead |
| Weight | | .011 ounces (0.34 grams) typical |



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05-04-07 Rev. 4

UF130 — UF150

Figure 1
Typical Forward Characteristics

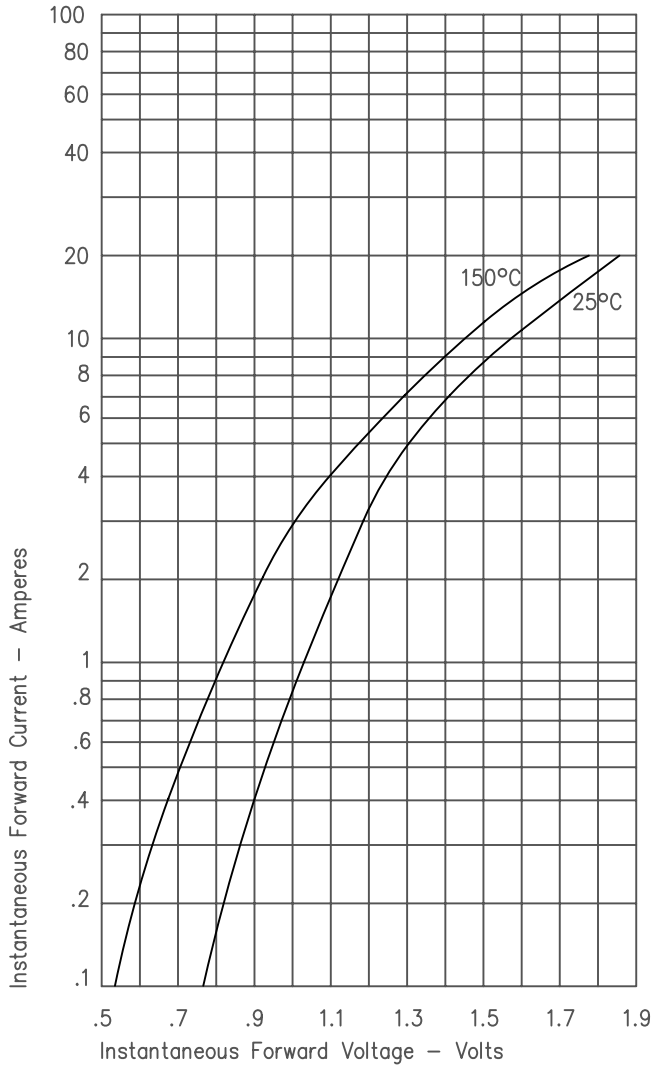


Figure 3
Typical Junction Capacitance

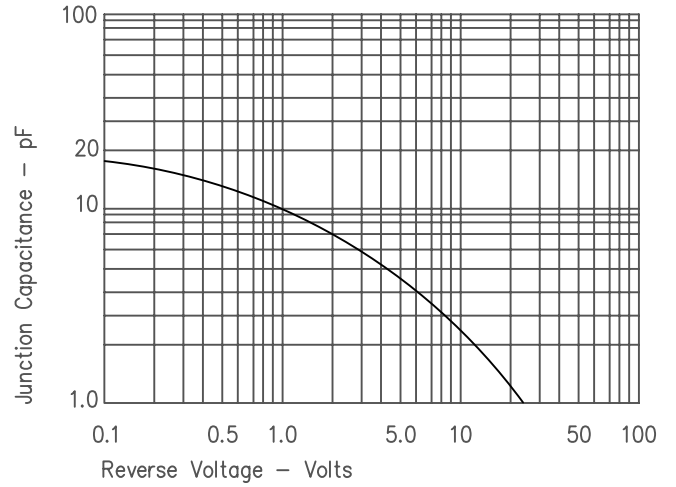


Figure 2
Typical Reverse Characteristics

