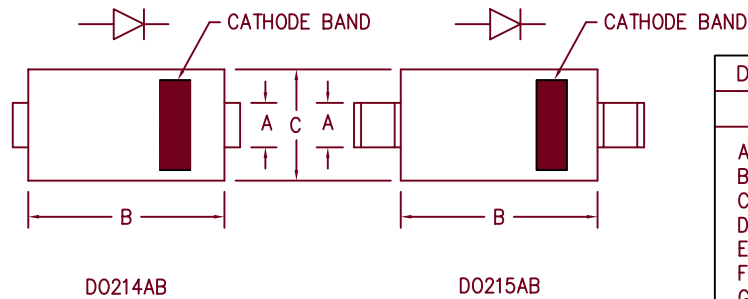
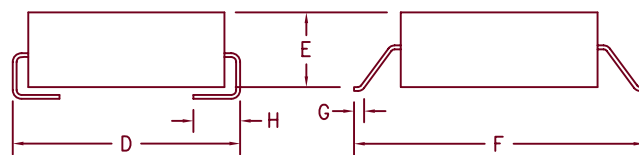


# Ultra Fast Recovery Rectifiers

## UFS330 — UFS350



| Dim. | Inches  |         | Millimeter |         | Notes |
|------|---------|---------|------------|---------|-------|
|      | Minimum | Maximum | Minimum    | Maximum |       |
| A    | .117    | .123    | 2.97       | 3.12    |       |
| B    | .260    | .280    | 6.60       | 7.11    |       |
| C    | .220    | .245    | 5.59       | 6.22    |       |
| D    | .307    | .322    | 7.80       | 8.18    |       |
| E    | .075    | .095    | 1.91       | 2.41    |       |
| F    | .380    | .400    | 9.65       | 10.16   |       |
| G    | .025    | .040    | .640       | 1.02    |       |
| H    | .030    | .060    | .760       | 1.52    |       |



| Microsemi<br>Catalog Number | Working<br>Peak Reverse<br>Voltage | Repetitive<br>Peak Reverse<br>Voltage |
|-----------------------------|------------------------------------|---------------------------------------|
| *UFS330                     | 300V                               | 300V                                  |
| *UFS340                     | 400V                               | 400V                                  |
| *UFS350                     | 500V                               | 500V                                  |

\* Add Suffix J for J Lead or G for Gull Wing Lead Configuration

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

### Electrical Characteristics

|                              |                     |                                       |
|------------------------------|---------------------|---------------------------------------|
| Average forward current      | $I_F(AV)$ 3.0 Amps  | Square wave                           |
| Maximum surge current        | $I_{FSM}$ 100 Amps  | 8.3ms, half sine, $T_J = 175^\circ C$ |
| Max peak forward voltage     | $V_{FM}$ 1.1 Volts  | $I_{FM} = 3.0A; T_J = 25^\circ C^*$   |
| 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 | $C_J$ 16 pF         | $V_R = 10V, T_J = 25^\circ C$         |

\*Pulse test: Pulse width 300  $\mu sec$ , 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    | $R_{\theta JL}$ | 25°C/W Junction to lead           |
| Weight                        |                 | .0047 ounces (.013 grams) typical |



8700 East Thomas Road, P.O. Box 1390  
 Scottsdale, AZ 85252  
 PH: (480) 941-6300  
 FAX: (480) 947-1503  
[www.microsemi.com](http://www.microsemi.com)

05-08-07 Rev. 2

# UFS330 — UFS350

Figure 1  
Typical Forward Characteristics

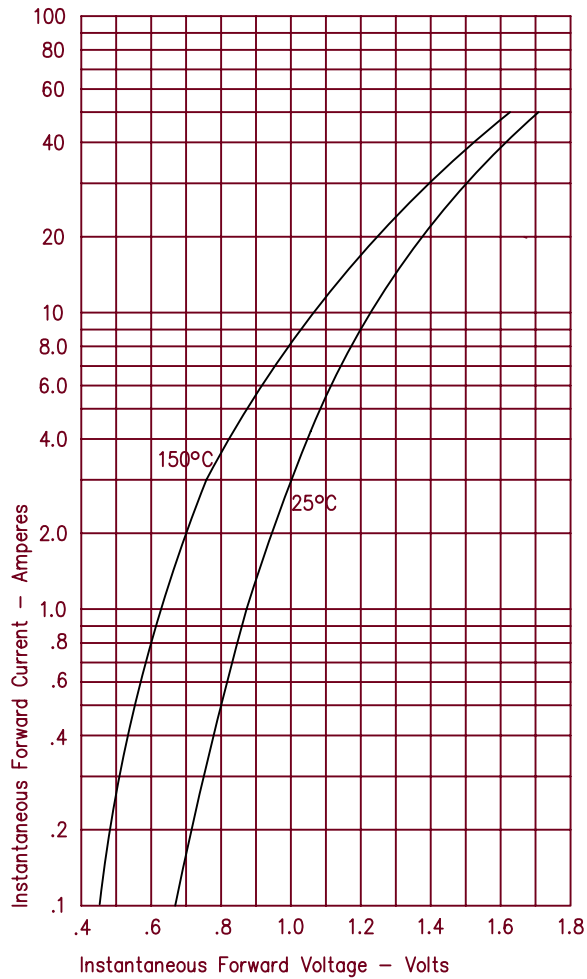


Figure 3  
Typical Junction Capacitance

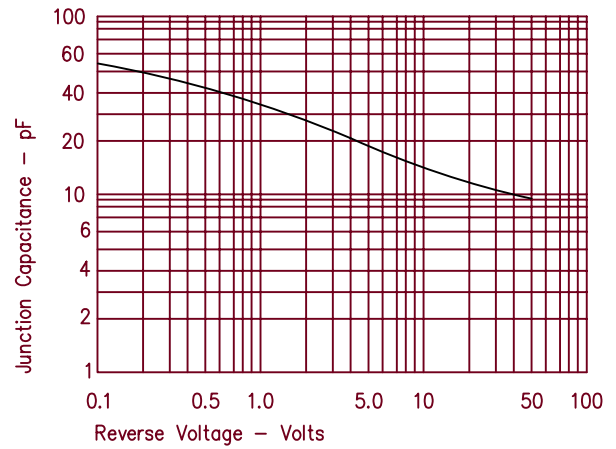


Figure 2  
Typical Reverse Characteristics

