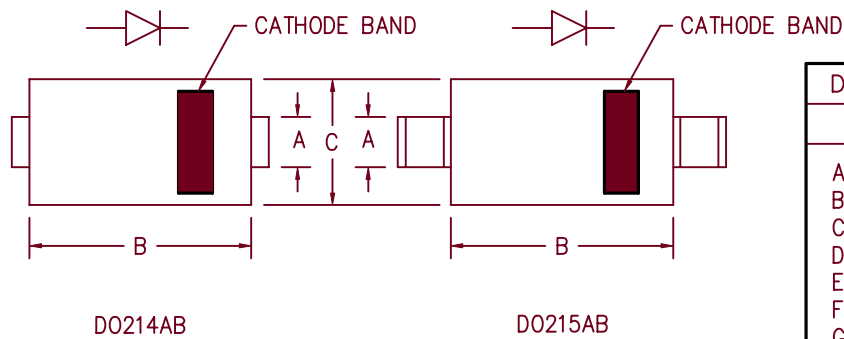
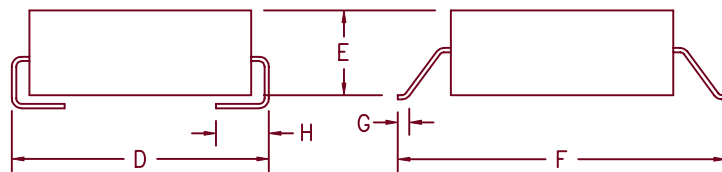


# Ultra Fast Recovery Rectifiers

## 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 Catalog Number | Working Peak Reverse Voltage | Repetitive Peak Reverse 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      | IF(AV) 3.0 Amps      | Square wave                                 |
| Maximum surge current        | IFSM 100 Amps        | 8.3ms, half sine, $T_J = 175^\circ\text{C}$ |
| Max peak forward voltage     | VFM 1.1 Volts        | IFM = 3.0A; $T_J = 25^\circ\text{C}$ *      |
| Max reverse recovery time    | $t_{RR}$ 50 ns       | 1/2A, 1A, 1/4A, $T_J = 25^\circ\text{C}$    |
| Max peak reverse current     | IRM 10 $\mu\text{A}$ | VRRM, $T_J = 25^\circ\text{C}$              |
| Typical junction capacitance | CJ 16 pF             | VR = 10V, $T_J = 25^\circ\text{C}$          |

\*Pulse test: Pulse width 300  $\mu\text{sec}$ , Duty cycle 2%

| Thermal and Mechanical Characteristics |               |                                   |
|--|---------------|-----------------------------------|
| Storage temperature range              | TSTG          | -55°C to 175°C                    |
| Operating junction temp range          | TJ            | -55°C to 175°C                    |
| Maximum thermal resistance             | R $\theta$ JL | 25°C/W Junction to lead           |
| Weight                                 |               | .0047 ounces (.013 grams) typical |

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# UFS330 – UFS350

Figure 1  
Typical Forward Characteristics

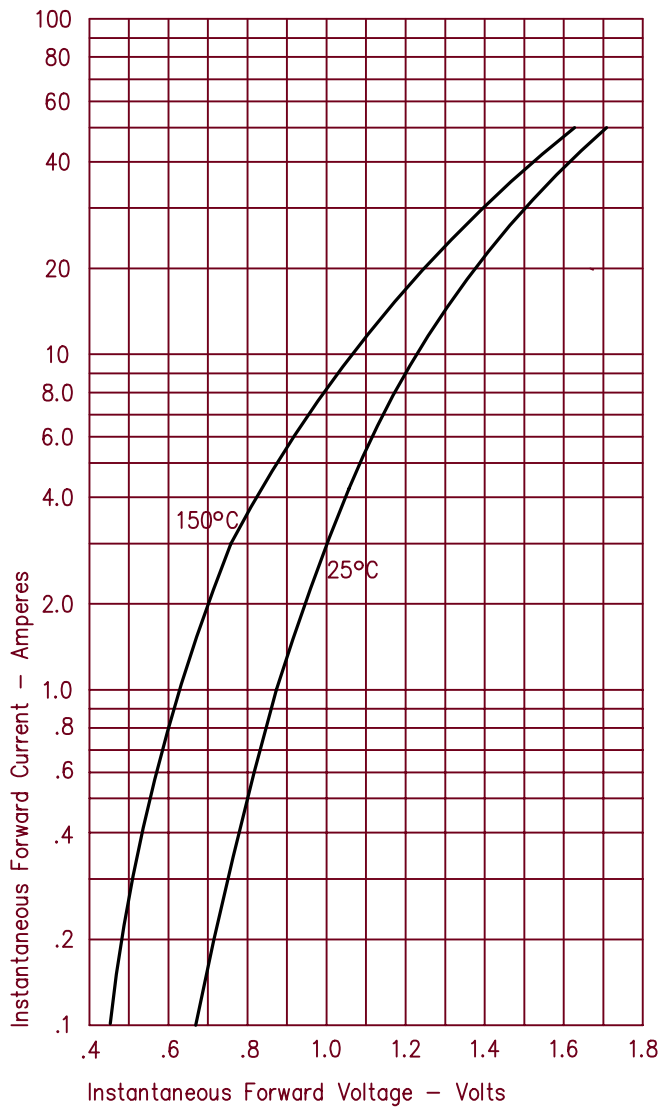


Figure 3  
Typical Junction Capacitance

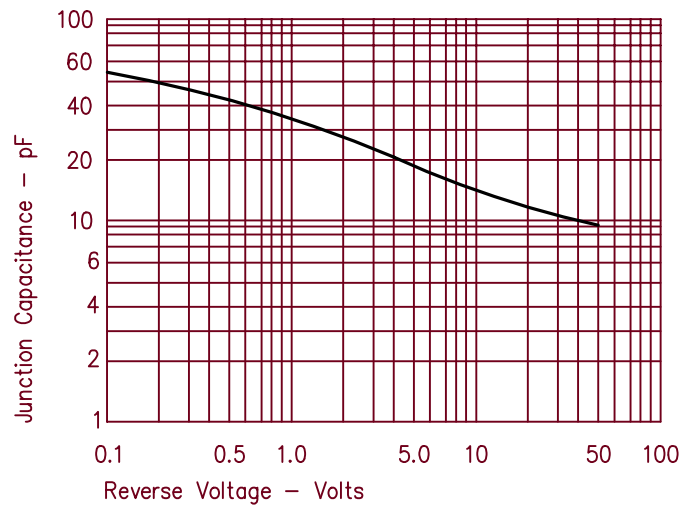


Figure 2  
Typical Reverse Characteristics

