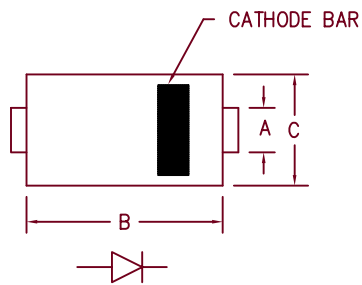
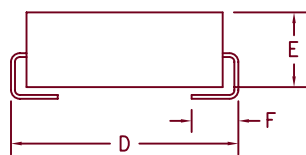


Ultra Fast Recovery Rectifiers

UFS160J — UFS180J



| Dim. | Inches | | Millimeter | | Notes |
|------|---------|---------|------------|---------|-------|
| | Minimum | Maximum | Minimum | Maximum | |
| A | .073 | .087 | 1.85 | 2.21 | |
| B | .160 | .180 | 4.06 | 4.57 | |
| C | .130 | .155 | 3.30 | 3.94 | |
| D | .205 | .220 | 5.21 | 5.59 | |
| E | .075 | .130 | 1.91 | 3.30 | |
| F | .030 | .060 | .760 | 1.52 | |



DO-214BA Package

| Microsemi Catalog Number | Industry Part Number | Working Peak Reverse Voltage | Repetitive Peak Reverse Voltage |
|--------------------------|----------------------|------------------------------|---------------------------------|
| UFS160J | ER1J MURS160T3 | 600V | 600V |
| UFS170J | | 700V | 700V |
| UFS180J | ER1K | 800V | 800V |

- Ultra Fast Recovery
- 175°C Junction Temperature
- VRRM 600 to 800 Volts
- 1 Amp Current Rating
- [†]RR 60nS Max.

| Electrical Characteristics | | | |
|------------------------------|-----------------------------|--|--|
| Average forward current | I _{F(AV)} 1.0 Amps | T _L = 140°C, Square wave, R _{θJL} = 15°C/W | |
| Maximum surge current | I _{FSM} 25 Amps | 8.3ms, half sine, T _J = 175°C | |
| Max peak forward voltage | V _{FM} .89 Volts | I _{FM} = 0.1A: T _J = 25°C* | |
| Max peak forward voltage | V _{FM} 1.2 Volts | I _{FM} = 1.0A: T _J = 25°C* | |
| Max reverse recovery time | [†] RR 60 nS | 1/2A, 1A, 1/4A, T _J = 25°C | |
| Max peak reverse current | I _{RM} 20 μA | V _R = 10V, T _J = 25°C | |
| Typical junction capacitance | C _J 5.5 pF | V _R = 10V, T _J = 25°C | |

*Pulse test: Pulse width 300 μsec, 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 _{θJL} | 15°C/W Junction to lead |
| Weight | | .0047 ounces (.013 grams) typical |



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05-08-07 Rev. 3

UFS160J — UFS180J

Figure 1
Typical Forward Characteristics

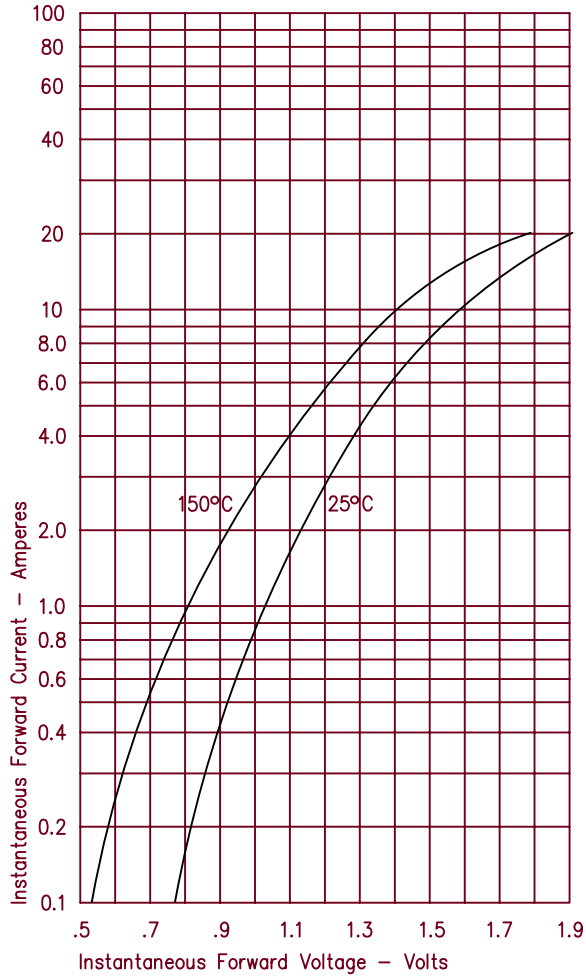


Figure 3
Typical Junction Capacitance

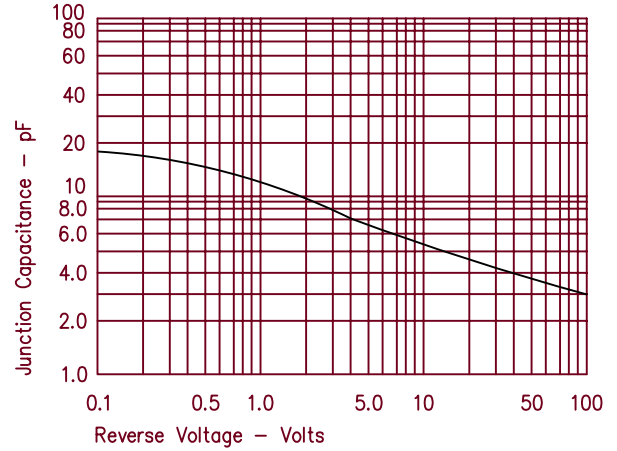


Figure 2
Typical Reverse Characteristics

