



## High Voltage Power Diodes Ultra-Fast Recovery

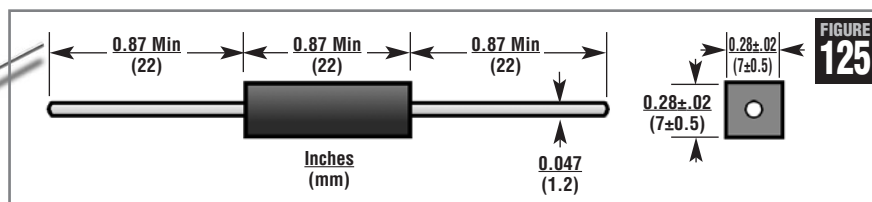


FIGURE 125

| HVCA<br>Number                                                                  | Repetitive<br>Peak Reverse<br>V <sub>RRM</sub><br>V(Volts) | Avg. Forward<br>Current Maximum<br>I <sub>FAVM</sub> @ |                                          | Max. Forward<br>Voltage Drop<br>V <sub>F</sub> @I <sub>F</sub><br>V(Volts) | Max. Reverse<br>Recovery<br>Time<br>T <sub>rr</sub> (nsec) | Max. Reverse<br>Current<br>I <sub>R</sub> @V <sub>RRM</sub> @25°C<br>μA (microAmps) | Max. Surge<br>Current<br>I <sub>FSM</sub> (8.3ms)<br>A (Amps) | Figure |
|---------------------------------------------------------------------------------|------------------------------------------------------------|--------------------------------------------------------|------------------------------------------|----------------------------------------------------------------------------|------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------|--------|
|                                                                                 |                                                            | T <sub>A</sub> =55°C<br>mA (milliamps)                 | T <sub>OIL</sub> =55°C<br>mA (milliamps) |                                                                            |                                                            |                                                                                     |                                                               |        |
| UX-Ultra Fast Recovery High Current Diode                                       |                                                            |                                                        |                                          |                                                                            |                                                            |                                                                                     |                                                               |        |
| UX-FOB                                                                          | 8000                                                       | 500                                                    | 600                                      | 12.0                                                                       | 40                                                         | 0.5                                                                                 | 20                                                            | 125    |
| UX-FBR8                                                                         | 8000                                                       | 420                                                    | 500                                      | 12.0                                                                       | 40                                                         | 0.5                                                                                 | 20                                                            | 124    |
| Dimensions for UX-FBR8 – Length L (inches) - 0.354, Diameter D (inches) - 0.197 |                                                            |                                                        |                                          |                                                                            |                                                            |                                                                                     |                                                               |        |
| UX-F15B                                                                         | 15000                                                      | 200                                                    | 320                                      | 16.0                                                                       | 50                                                         | 0.5                                                                                 | 20                                                            | 125    |
| UX-F2CJ 15                                                                      | 15000                                                      | 150                                                    | 250                                      | 16.0                                                                       | 50                                                         | 0.5                                                                                 | 20                                                            | 19     |

## Medium Power High Voltage Silicon Diodes

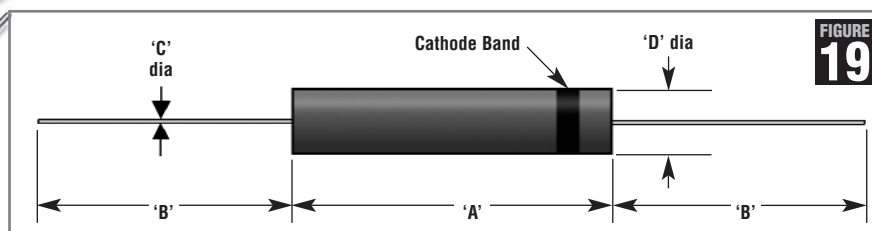
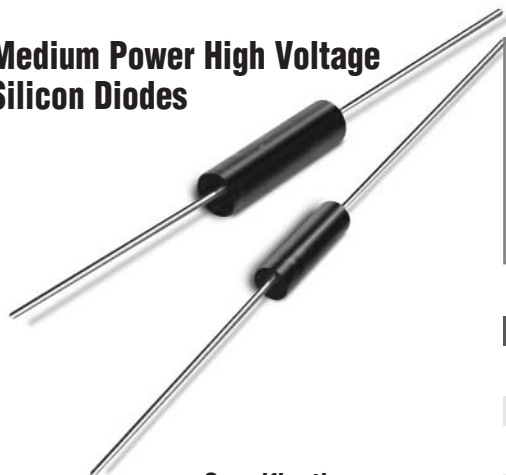


FIGURE 19

Dimension Details

| A       |       | B       |    | C       |         | D       |      |
|---------|-------|---------|----|---------|---------|---------|------|
| Maximum |       | Minimum |    | Minimum | Maximum | Maximum |      |
| Inch    | mm    | Inch    | mm | Inch    | mm      | Inch    | mm   |
| 0.60    | 15.24 | 0.94    | 24 | 0.028   | 0.71    | 0.032   | 0.81 |
|         |       |         |    |         |         | 0.170   | 4.30 |

### Specifications

| HVCA<br>Number | Repetitive<br>Peak<br>Reverse<br>Voltage<br>V <sub>RRM</sub><br>V(Volts) | Average Forward<br>Current<br>Maximum<br>I <sub>FAVM</sub> @ |                                          | Maximum<br>Single Cycle<br>Surge<br>Current<br>I <sub>FSM</sub><br>A (Amps) | Maximum<br>Forward<br>Voltage Drop<br>V <sub>F</sub> @T <sub>A</sub> =25°C<br>& 100mA<br>V (Volts) | Maximum<br>Reverse<br>Current<br>I <sub>R</sub> @V <sub>RRM</sub> |                                | Maximum<br>Reverse<br>Recovery<br>Time@<br>T <sub>A</sub> =25°C<br>T <sub>rr</sub> (nsec) | Maximum Virtual<br>Junction Cap.<br>C <sub>j</sub> @T <sub>A</sub> =25°C<br>V <sub>RRM</sub> =0<br>Freq=1Mhz<br>pF(Picofarads) |
|----------------|--------------------------------------------------------------------------|--------------------------------------------------------------|------------------------------------------|-----------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|--------------------------------|-------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
|                |                                                                          | T <sub>A</sub> =40°C<br>mA (milliamps)                       | T <sub>OIL</sub> =55°C<br>mA (milliamps) |                                                                             |                                                                                                    | T <sub>A</sub> =25°C<br>μAmps                                     | T <sub>A</sub> =100°C<br>μAmps |                                                                                           |                                                                                                                                |
| 2CL2F          | 8,000                                                                    | 100                                                          | 220                                      | 20                                                                          | 10.0                                                                                               | 2.0                                                               | 40                             | -                                                                                         | 15                                                                                                                             |
| 2CL2G          | 10,000                                                                   | 100                                                          | 220                                      | 20                                                                          | 12.0                                                                                               | 2.0                                                               | 40                             | -                                                                                         | 15                                                                                                                             |
| 2CL2H          | 12,000                                                                   | 100                                                          | 220                                      | 20                                                                          | 13.0                                                                                               | 2.0                                                               | 40                             | -                                                                                         | 15                                                                                                                             |
| 2CL2J          | 15,000                                                                   | 100                                                          | 220                                      | 20                                                                          | 16.0                                                                                               | 2.0                                                               | 40                             | -                                                                                         | 15                                                                                                                             |
| 2CL2FF         | 8,000                                                                    | 60                                                           | 120                                      | 10                                                                          | 16.0                                                                                               | 2.0                                                               | 50                             | 150                                                                                       | 15                                                                                                                             |
| 2CL2FG         | 10,000                                                                   | 60                                                           | 120                                      | 10                                                                          | 18.0                                                                                               | 2.0                                                               | 50                             | 150                                                                                       | 15                                                                                                                             |
| 2CL2FH         | 12,000                                                                   | 60                                                           | 120                                      | 10                                                                          | 20.0                                                                                               | 2.0                                                               | 50                             | 150                                                                                       | 15                                                                                                                             |
| 2CL2FJ         | 15,000                                                                   | 60                                                           | 120                                      | 10                                                                          | 24.0                                                                                               | 2.0                                                               | 50                             | 150                                                                                       | 15                                                                                                                             |
| 2CL2FK         | 10,000                                                                   | 100                                                          | 220                                      | 10                                                                          | 22.0                                                                                               | 2.0                                                               | 50                             | 100                                                                                       | 15                                                                                                                             |
| 2CL2FL         | 15,000                                                                   | 100                                                          | 220                                      | 10                                                                          | 26.0                                                                                               | 2.0                                                               | 50                             | 100                                                                                       | 15                                                                                                                             |
| 2CL2FM         | 20,000                                                                   | 100                                                          | 220                                      | 10                                                                          | 35.0                                                                                               | 2.0                                                               | 50                             | 100                                                                                       | 15                                                                                                                             |
| 2CL2FP         | 30,000                                                                   | 100                                                          | 220                                      | 10                                                                          | 52.0                                                                                               | 2.0                                                               | 50                             | 100                                                                                       | 15                                                                                                                             |

### High Current Version

|         |        |     |     |    |      |     |    |     |    |
|---------|--------|-----|-----|----|------|-----|----|-----|----|
| HV37-08 | 8,000  | 210 | 410 | 15 | 12.0 | 2.0 | 10 | 150 | 15 |
| HV37-10 | 10,000 | 190 | 365 | 15 | 14.0 | 2.0 | 10 | 150 | 15 |