



# CL03 SERIES

8 to 30kV, 120 to 400mA, 65 to 100nS  
Axial Lead Power Diodes



## Features

- Medium Current
- Molded Plastic Body, ANSI/UL94 V-0 Rated Material

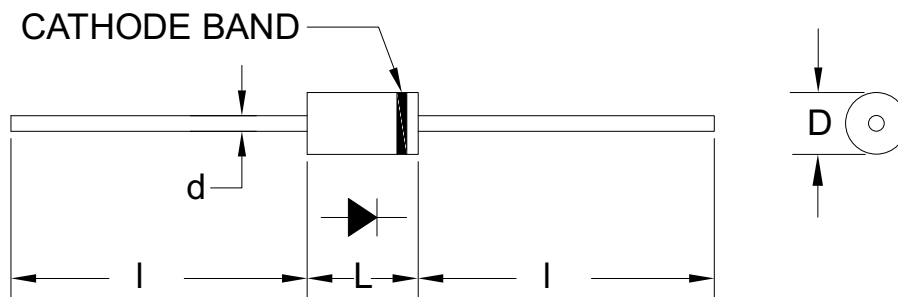
## Specifications<sup>1</sup>

| Part Number | V <sub>RRM</sub><br>V | I <sub>FAVM</sub><br>mA | V <sub>F</sub><br>V | I <sub>R</sub><br>μA | I <sub>FSM</sub><br>A | C <sub>J</sub><br>pF | T <sub>RR</sub><br>nS | L<br>in. | D<br>in. | d<br>in. | l<br>in. |
|-------------|-----------------------|-------------------------|---------------------|----------------------|-----------------------|----------------------|-----------------------|----------|----------|----------|----------|
| CL03-08     | 8000                  | 400                     | 17.0                | 2                    | 20                    | 6.2                  | 100                   | 0.87     | 0.30     | 0.05     | 0.94     |
| CL03-08F    | 8000                  | 350                     | 19.0                | 2                    | 20                    | 6.2                  | 65                    | 0.87     | 0.30     | 0.05     | 0.94     |
| CL03-10     | 10000                 | 300                     | 18.0                | 2                    | 20                    | 5.3                  | 100                   | 0.87     | 0.30     | 0.05     | 0.94     |
| CL03-10F    | 10000                 | 250                     | 21.0                | 2                    | 20                    | 5.3                  | 65                    | 0.87     | 0.30     | 0.05     | 0.94     |
| CL03-12     | 12000                 | 250                     | 21.0                | 2                    | 20                    | 4.4                  | 100                   | 0.87     | 0.30     | 0.05     | 0.94     |
| CL03-12F    | 12000                 | 200                     | 23.0                | 2                    | 20                    | 4.4                  | 65                    | 0.87     | 0.30     | 0.05     | 0.94     |
| CL03-15     | 15000                 | 200                     | 23.0                | 2                    | 20                    | 3.5                  | 100                   | 0.87     | 0.30     | 0.05     | 0.94     |
| CL03-15F    | 15000                 | 150                     | 26.5                | 2                    | 20                    | 3.5                  | 65                    | 0.87     | 0.30     | 0.05     | 0.94     |
| CL03-20     | 20000                 | 120                     | 30.0                | 2                    | 20                    | 2.8                  | 100                   | 0.87     | 0.30     | 0.05     | 0.94     |
| CL03-25     | 25000                 | 120                     | 34.0                | 2                    | 20                    | 2.4                  | 100                   | 0.87     | 0.30     | 0.05     | 0.94     |
| CL03-30     | 30000                 | 120                     | 38.0                | 2                    | 20                    | 5.5                  | 100                   | 0.87     | 0.30     | 0.05     | 0.94     |

| Temperature °C                      |  |
|-------------------------------------|--|
| <b>Operating Temperature</b>        | -55 to 125 (CL03-25, CL03-30)<br>-55 to 150 (All other models) |
| <b>Storage Temperature</b>          | -55 to 175   |
| <b>Maximum Junction Temperature</b> | 125 (CL03-25, CL03-30)<br>150 (All other models)               |

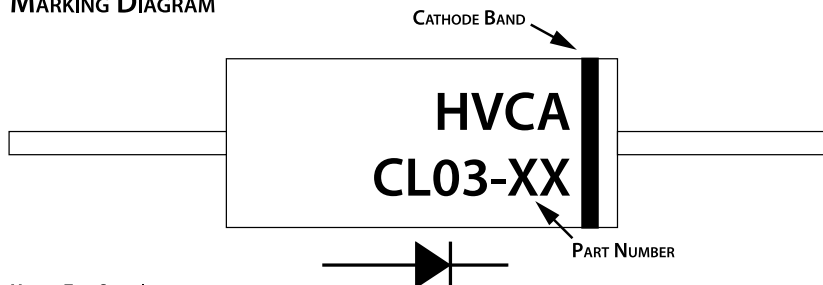
<sup>1</sup>125°C ambient temperature unless stated otherwise.

## Drawings



Dimensions in inches, tolerances ±0.020 except as noted

## MARKING DIAGRAM



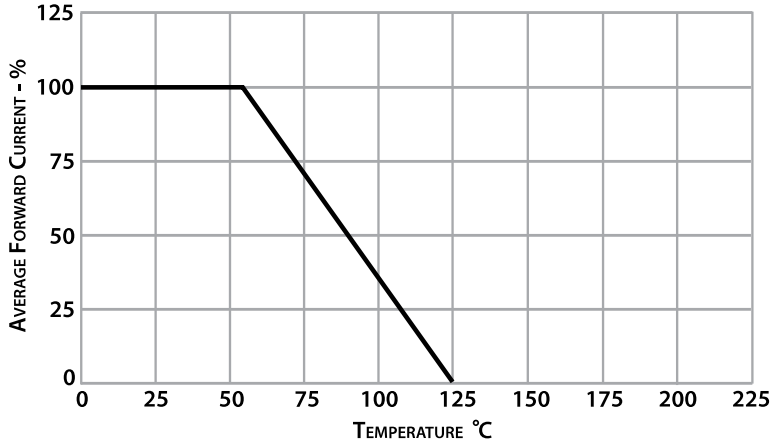
MARKING TYPE: SILVER, INKJET  
(MARKINGS WILL WRAP ENTIRE BODY OF DIODE AND ARE SUBJECT TO MINOR CHANGES)



# CL03 SERIES

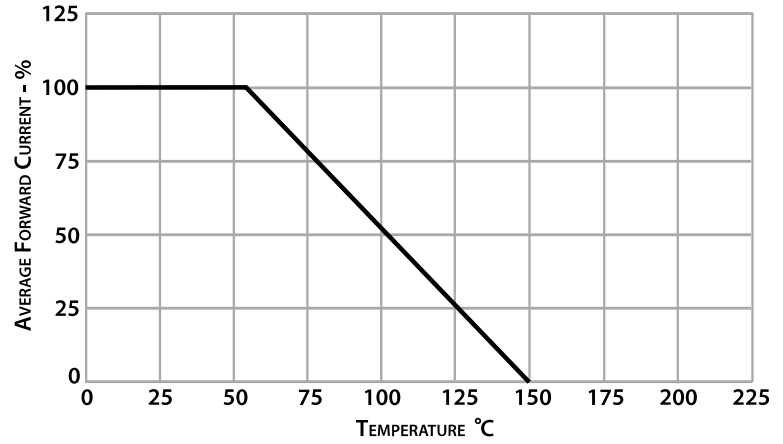
CL03-25, CL03-30

FORWARD CURRENT DERATING CURVE



All other models

FORWARD CURRENT DERATING CURVE



## Specification Definitions

| Specifications          | Conditions   |
|-------------------------|--|
| <b>V<sub>RRM</sub></b>  | Maximum Repetitive Reverse Voltage -   |
| <b>I<sub>FAVM</sub></b> | Maximum Average Forward Current At T <sub>A</sub> = 55°C   |
| <b>V<sub>F</sub></b>    | Maximum Forward Voltage Drop At I <sub>FAVM</sub>  |
| <b>I<sub>R</sub></b>    | Maximum Leakage Current At V <sub>RRM</sub>  |
| <b>I<sub>FSM</sub></b>  | Maximum Surge Current At 8.3mS, Single Half Sine   |
| <b>C<sub>J</sub></b>    | Typical Junction Capacitance At V <sub>R</sub> = 0VDC, f = 1MHz  |
| <b>T<sub>RR</sub></b>   | Maximum Reverse Recovery Time I <sub>F</sub> = 0.5 I <sub>FAVM</sub> ; I <sub>R</sub> = -I <sub>FAVM</sub> ; I <sub>RR</sub> = -0.25 I <sub>FAVM</sub> |

Note: Specifications subject to change without notice. Photo is representation only.

