# 2CL SERIES

4 to 35kV, 60 to 140mA, 100nS to Standard Recovery
Axial Lead Power Diodes

## Features

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

## Specifications[1]

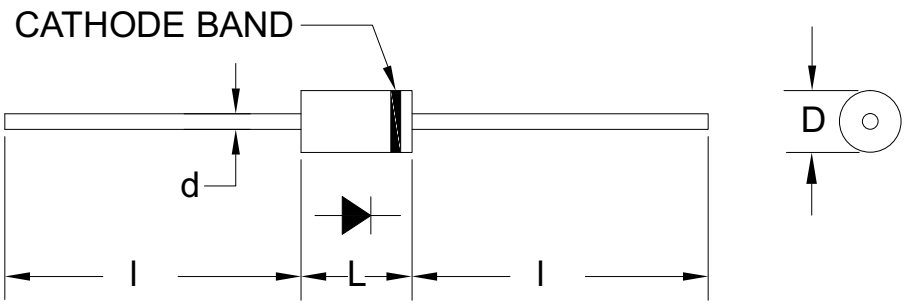
| Part Number | $V_{RRM}$ V | $I_{FAVM1}$ mA | $I_{FAVM2}$ mA | $V_F$ V | $I_{R1}$ µA | $I_{R2}$ µA | $I_{FSM}$ A | $C_J$ pF | $T_{RR}$[2] nS | L in. | D in. | d in. | l in. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **2CL2FD** | 4000 | 140 | 250 | 7.5 | 2 | 10 | 20 | 6.7 | 100 | 0.60 | 0.17 | 0.032 | 0.94 |
| **2CL2FE** | 6000 | 120 | 240 | 9.0 | 2 | 10 | 20 | 5.0 | 100 | 0.60 | 0.17 | 0.032 | 0.94 |
| **2CL2F** | 8000 | 100 | 220 | 10.0 | 2 | 10 | 20 | - | - | 0.60 | 0.17 | 0.032 | 0.94 |
| **2CL2FF** | 8000 | 60 | 120 | 16.0 | 2 | 10 | 10 | 4.1 | 150 | 0.60 | 0.17 | 0.032 | 0.94 |
| **2CL2FG** | 10000 | 60 | 120 | 18.0 | 2 | 10 | 10 | 3.3 | 150 | 0.60 | 0.17 | 0.032 | 0.94 |
| **2CL2FK** | 10000 | 140 | 240 | 22.0 | 2 | 10 | 10 | 2.7 | 100 | 0.60 | 0.17 | 0.032 | 0.94 |
| **2CL2G** | 10000 | 100 | 220 | 12.0 | 2 | 10 | 20 | - | - | 0.60 | 0.17 | 0.032 | 0.94 |
| **2CL2FH** | 12000 | 60 | 120 | 20.0 | 2 | 10 | 10 | 2.3 | 150 | 0.60 | 0.17 | 0.032 | 0.94 |
| **2CL2H** | 12000 | 100 | 220 | 13.0 | 2 | 10 | 20 | - | - | 0.60 | 0.17 | 0.032 | 0.94 |
| **2CL2FJ** | 15000 | 60 | 120 | 24.0 | 2 | 10 | 10 | 1.8 | 150 | 0.60 | 0.17 | 0.032 | 0.94 |
| **2CL2FL** | 15000 | 120 | 200 | 26.0 | 2 | 10 | 10 | 2.5 | 100 | 0.60 | 0.17 | 0.032 | 0.94 |
| **2CL2J** | 15000 | 100 | 220 | 16.0 | 2 | 10 | 20 | - | - | 0.60 | 0.17 | 0.032 | 0.94 |
| **2CL2FM** | 20000 | 100 | 170 | 35.0 | 2 | 10 | 10 | 1.9 | 100 | 0.60 | 0.17 | 0.032 | 0.94 |
| **2CL2FN** | 25000 | 90 | 150 | 41.0 | 2 | 10 | 10 | - | 100 | 0.60 | 0.17 | 0.032 | 0.94 |
| **2CL2FP** | 30000 | 80 | 140 | 46.0 | 2 | 10 | 10 | 1.1 | 100 | 0.60 | 0.17 | 0.032 | 0.94 |
| **2CL2FR** | 35000 | 60 | 100 | 52.0 | 2 | 10 | 10 | 0.9 | 100 | 0.60 | 0.17 | 0.032 | 0.94 |

| Temperature °C | |
|---|---|
| **Operating Temperature** | -55 to 125 |
| **Storage Temperature** | -55 to 175 |
| **Maximum Junction Temperature** | 125 |

[1]25°C ambient temperature unless stated otherwise.

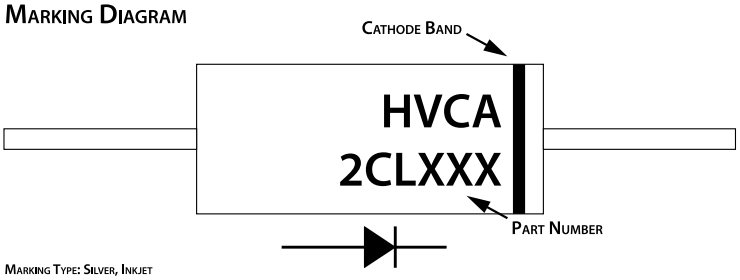
[2]A "-" indicates that the component is a standard recovery device and no $T_{RR}$ data is taken.

## Drawings



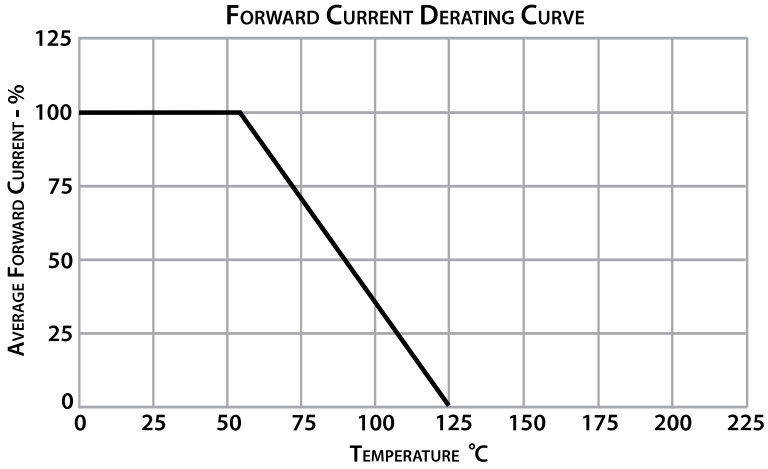

Dimensions in inches, tolerances ±0.020 except as noted

MARKING DIAGRAM




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

FORWARD CURRENT DERATING CURVE




## Specification Definitions

| Specifications | | Conditions |
|---|---|---|
| $V_{RRM}$ | Maximum Repetitive Reverse Voltage | - |
| $I_{FAVM1}$ | Maximum Average Forward Current | At $T_A$ = 40°C, In Air |
| $I_{FAVM2}$ | Maximum Average Forward Current | At $T_A$ = 55°C, In Oil |
| $V_F$ | Maximum Forward Voltage Drop | At 100mA |
| $I_{R1}$ | Maximum Leakage Current | At $V_{RRM}$ |
| $I_{R2}$ | Maximum Leakage Current | At $V_{RRM}$, 100°C |
| $I_{FSM}$ | Maximum Surge Current | At 8.3 mS, Single Half Sine |
| $C_J$ | Typical Junction Capacitance | At $V_R$ = 0VDC, f = 1MHz |
| $T_{RR}$ | Maximum Reverse Recovery Time | $I_F$ = 40mA; $I_R$ = -80mA; $I_{RR}$ = -20mA |

RoHS COMPLIANT

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