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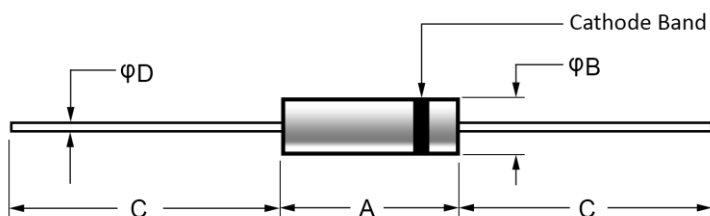
The 2CL series can be ordered from our company with quick-release crimps. Please add -QR to the end of the part number.

#### PRODUCT ABSTRACT

2CL is a diverse series of high frequency, high voltage rectifiers designed for prolonged use at high power and temperature. The 2CL is notable for its avalanche breakdown protection in addition to a low leakage current and fast recovery time. Each semiconductor comes in an axial epoxy resin package that is heat resistant to temperatures up to one hundred-fifty degrees Celsius and down to negative forty Celsius.

Applications include x-ray generators, induction heaters, transmitter power supplies, and so on.

#### SERIES DIMENSIONAL DATA



Notes: All dimensions in millimeters. B & D are  $\pm 0.03$ .

| Series Type  | A   | $\Phi B$ | C        | $\Phi D$  |
|--------------|-----|----------|----------|-----------|
| 2CL70        | 8   | 3        | 25.0 Min | 0.6 $\pm$ |
| 2CL71        | 8   | 3        | 25.0 Min | 0.6 $\pm$ |
| 2CL72        | 10  | 3        | 25.0 Min | 0.6 $\pm$ |
| 2CL73        | 10  | 3        | 25.0 Min | 0.6 $\pm$ |
| 2CL74        | 10  | 3        | 25.0 Min | 0.6 $\pm$ |
| 2CL75        | 12  | 3        | 25.0 Min | 0.6 $\pm$ |
| 2CL77        | 12  | 3        | 25.0 Min | 0.6 $\pm$ |
| 2CL70A       | 6.5 | 2.5      | 25.0 Min | 0.6 $\pm$ |
| 2CL71A       | 6.5 | 2.5      | 25.0 Min | 0.6 $\pm$ |
| 2CL72A       | 10  | 2.5      | 25.0 Min | 0.6 $\pm$ |
| 2CL73A       | 10  | 2.5      | 25.0 Min | 0.6 $\pm$ |
| 2CL75A       | 10  | 2.5      | 25.0 Min | 0.6 $\pm$ |
| 2CL01-09     | 22  | 7.5      | 25.0 Min | 0.6 $\pm$ |
| 2CL01-12     | 22  | 7.5      | 25.0 Min | 0.6 $\pm$ |
| 2CL04-12     | 22  | 7.5      | 25.0 Min | 0.6 $\pm$ |
| 2CL01-12A    | 22  | 7.5      | 25.0 Min | 0.6 $\pm$ |
| 2CL04-12A    | 22  | 7.5      | 25.0 Min | 0.6 $\pm$ |
| 2CL15KV/20mA | 12  | 3        | 25.0 Min | 0.6 $\pm$ |
| 2CL18KV/20mA | 12  | 3        | 25.0 Min | 0.6 $\pm$ |
| 2CL20KV/20mA | 12  | 3        | 25.0 Min | 0.6 $\pm$ |
| 2CL25KV/20mA | 12  | 3        | 25.0 Min | 0.6 $\pm$ |
| 2CL15KV/30mA | 12  | 3        | 25.0 Min | 0.6 $\pm$ |
| 2CL18KV/30mA | 12  | 3        | 25.0 Min | 0.6 $\pm$ |
| 2CL20KV/30mA | 12  | 3        | 25.0 Min | 0.6 $\pm$ |
| 2CL25KV/30mA | 12  | 3        | 25.0 Min | 0.6 $\pm$ |
| 2CL0508      | 15  | 4.5      | 25.0 Min | 0.8 $\pm$ |
| 2CL0510      | 15  | 4.5      | 25.0 Min | 0.8 $\pm$ |
| 2CL0512      | 15  | 4.5      | 25.0 Min | 0.8 $\pm$ |
| 2CL0515      | 15  | 4.5      | 25.0 Min | 0.8 $\pm$ |
| 2CL0518      | 15  | 4.5      | 25.0 Min | 0.8 $\pm$ |
| 2CL0520      | 15  | 4.5      | 25.0 Min | 0.8 $\pm$ |
| 2CL0508      | 15  | 4.5      | 25.0 Min | 0.8 $\pm$ |
| 2CL0510      | 15  | 4.5      | 25.0 Min | 0.8 $\pm$ |
| 2CL0512      | 15  | 4.5      | 25.0 Min | 0.8 $\pm$ |
| 2CL0515      | 15  | 4.5      | 25.0 Min | 0.8 $\pm$ |
| 2CL0518      | 15  | 4.5      | 25.0 Min | 0.8 $\pm$ |
| 2CL0520      | 15  | 4.5      | 25.0 Min | 0.8 $\pm$ |
| 2CL10-04     | 6.5 | 2.5      | 25.0 Min | 0.8 $\pm$ |
| 2CL10-06     | 6.5 | 2.5      | 25.0 Min | 0.8 $\pm$ |
| 2CL10-08     | 15  | 4.5      | 25.0 Min | 0.8 $\pm$ |
| 2CL10-10     | 15  | 4.5      | 25.0 Min | 0.8 $\pm$ |
| 2CL10-12     | 15  | 4.5      | 25.0 Min | 0.8 $\pm$ |
| 2CL10-15     | 15  | 4.5      | 25.0 Min | 0.8 $\pm$ |
| 2CL10-08     | 15  | 4.5      | 25.0 Min | 0.8 $\pm$ |

# 2CL SERIES

High Voltage Rectifier Series



## SERIES DIMENSIONAL DATA (cont.)

|           |         |           |          |      |          |    |     |          |      |
|-----------|---------|-----------|----------|------|----------|----|-----|----------|------|
| 2CL10-10  | 15      | 4.5       | 25.0 Min | 0.8± | CL01-12  | 22 | 7.5 | 25.0 Min | 0.8± |
| 2CL10-12  | 15      | 4.5       | 25.0 Min | 0.8± | CL01-15  | 22 | 7.5 | 25.0 Min | 0.8± |
| 2CL10-15  | 15      | 4.5       | 25.0 Min | 0.8± | CL04-09  | 22 | 7.5 | 25.0 Min | 0.8± |
| 2CL10-20  | 15      | 4.5       | 25.0 Min | 0.8± | CL04-12  | 22 | 7.5 | 25.0 Min | 0.8± |
| 2CL20-04  | 6.5     | 2.5       | 25.0 Min | 0.8± | CL04-15  | 22 | 7.5 | 25.0 Min | 0.8± |
| 2CL20-08  | 15 / 9  | 4.5 / 5   | 25.0 Min | 0.8± | CL01-10D | 9  | 5   | 25.0 Min | 0.8± |
| 2CL20-10  | 15 / 9  | 4.5 / 5   | 25.0 Min | 0.8± | CL01-12D | 9  | 5   | 25.0 Min | 0.8± |
| 2CL20-12  | 15 / 9  | 4.5 / 5   | 25.0 Min | 0.8± | CL01-15D | 9  | 5   | 25.0 Min | 0.8± |
| 2CL20-15  | 15 / 9  | 4.5 / 5   | 25.0 Min | 0.8± | CL03-10T | 22 | 7.5 | 20.0 Min | 1.2± |
| 2CL20-06T | 15 / 22 | 4.5 / 7.5 | 25.0 Min | 0.8± | CL03-12T | 22 | 7.5 | 20.0 Min | 1.2± |
| 2CL20-08T | 15 / 22 | 4.5 / 7.5 | 25.0 Min | 0.8± | CL03-15T | 22 | 7.5 | 20.0 Min | 1.2± |
| 2CL20-10T | 15 / 22 | 4.5 / 7.5 | 25.0 Min | 0.8± | CL03-18T | 22 | 7.5 | 20.0 Min | 1.2± |
| 2CL20-12T | 15 / 22 | 4.5 / 7.5 | 25.0 Min | 0.8± | CL05-08T | 22 | 7.5 | 20.0 Min | 1.2± |
| 2CL20-15T | 15 / 22 | 4.5 / 7.5 | 25.0 Min | 0.8± | CL05-10T | 22 | 7.5 | 20.0 Min | 1.2± |
| 2CL20-18T | 15 / 22 | 4.5 / 7.5 | 25.0 Min | 0.8± | CL05-12T | 22 | 7.5 | 20.0 Min | 1.2± |
| CL01-09   | 22      | 7.5       | 25.0 Min | 0.8± | CL05-15T | 22 | 7.5 | 20.0 Min | 1.2± |

## SERIES ELECTRICAL SPECIFICATIONS (cont.)

| Series Type | V <sub>RRM</sub> (kV) | I <sub>F(AV)</sub> (mA) | V <sub>FM</sub> (V) | I <sub>FSM</sub> (A) | I <sub>RRM</sub> (μA) | t <sub>rr</sub> (nS) |
|-------------|-----------------------|-------------------------|---------------------|----------------------|-----------------------|----------------------|
| 2CL10-04    | 4                     | 100                     | 5                   | 10                   | 2.0                   | ---                  |
| 2CL20-04    | 4                     | 200                     | 7                   | 20                   | 2.0                   | ---                  |
| 2CL70       | 6                     | 5                       | 24.0                | 0.5                  | 2.0                   | 80                   |
| 2CL70A      | 6                     | 5                       | 24.0                | 0.5                  | 2.0                   | 80                   |
| 2CL10-06    | 6                     | 100                     | 7                   | 10                   | 2.0                   | ---                  |
| 2CL20-06T   | 6                     | 200                     | 15                  | 20                   | 2.0                   | 100/80               |
| 2CL71       | 8                     | 5                       | 30.0                | 0.5                  | 2.0                   | 80                   |
| 2CL71A      | 8                     | 5                       | 30.0                | 0.5                  | 2.0                   | 80                   |
| 2CL0508     | 8                     | 50                      | 9                   | 5                    | 2.0                   | ---                  |
| 2CL0508     | 8                     | 50                      | 16                  | 5                    | 2.0                   | 100                  |
| 2CL10-08    | 8                     | 100                     | 9                   | 10                   | 2.0                   | ---                  |
| 2CL10-08    | 8                     | 100                     | 16                  | 10                   | 2.0                   | 100                  |
| 2CL20-08    | 8                     | 200                     | 9                   | 20                   | 2.0                   | ---                  |
| 2CL20-08T   | 8                     | 200                     | 16                  | 20                   | 2.0                   | 100/80               |
| CL05-08T    | 8                     | 500                     | 16                  | 40                   | 5.0                   | 100/80               |
| 2CL01-09    | 9                     | 350                     | 10                  | 30                   | 5.0                   | ---                  |
| CL01-09     | 9                     | 350                     | 10                  | 30                   | 5.0                   | ---                  |
| CL04-09     | 9                     | 350                     | 10                  | 40                   | 5.0                   | ---                  |

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Aerospace Mgmt. Sys. Cert.  
AS/EN/JISQ9100:2009 Rev. C  
ISO9001:2008  
Cert No. 45325





### SERIES ELECTRICAL SPECIFICATIONS (cont.)

|              |    |     |      |     |     |        |
|--------------|----|-----|------|-----|-----|--------|
| 2CL72        | 10 | 5   | 36.0 | 0.5 | 2.0 | 80     |
| 2CL72A       | 10 | 5   | 36.0 | 0.5 | 2.0 | 80     |
| 2CL0510      | 10 | 50  | 11   | 5   | 2.0 | ---    |
| 2CL0510      | 10 | 50  | 18   | 5   | 2.0 | 100    |
| 2CL10-10     | 10 | 100 | 11   | 10  | 2.0 | ---    |
| 2CL10-10     | 10 | 100 | 18   | 10  | 2.0 | 100    |
| 2CL20-10     | 10 | 200 | 11   | 20  | 2.0 | ---    |
| 2CL20-10T    | 10 | 200 | 18   | 20  | 2.0 | 100/80 |
| CL01-10D     | 10 | 350 | 11   | 30  | 5.0 | ---    |
| CL03-10T     | 10 | 300 | 18   | 30  | 5.0 | 100/80 |
| CL05-10T     | 10 | 500 | 18   | 40  | 5.0 | 100/80 |
| 2CL73        | 12 | 5   | 45.0 | 0.5 | 2.0 | 80     |
| 2CL73A       | 12 | 5   | 45.0 | 0.5 | 2.0 | 80     |
| 2CL01-12     | 12 | 350 | 12   | 30  | 5.0 | ---    |
| 2CL04-12     | 12 | 500 | 12   | 40  | 5.0 | ---    |
| 2CL01-12A    | 12 | 350 | 12   | 30  | 5.0 | ---    |
| 2CL04-12A    | 12 | 500 | 12   | 40  | 5.0 | ---    |
| 2CL0512      | 12 | 50  | 13   | 5   | 2.0 | ---    |
| 2CL0512      | 12 | 50  | 22   | 5   | 2.0 | 100    |
| 2CL10-12     | 12 | 100 | 13   | 10  | 2.0 | ---    |
| 2CL10-12     | 12 | 100 | 22   | 10  | 2.0 | 100    |
| 2CL20-12     | 12 | 200 | 13   | 20  | 2.0 | ---    |
| 2CL20-12T    | 12 | 200 | 22   | 20  | 2.0 | 100/80 |
| CL01-12      | 12 | 350 | 13   | 30  | 5.0 | ---    |
| CL04-12      | 12 | 350 | 13   | 40  | 5.0 | ---    |
| CL01-12D     | 12 | 350 | 13   | 30  | 5.0 | ---    |
| CL03-12T     | 12 | 300 | 20   | 30  | 5.0 | 100/80 |
| CL05-12T     | 12 | 500 | 20   | 40  | 5.0 | 100/80 |
| 2CL74        | 14 | 5   | 51.0 | 0.5 | 2.0 | 80     |
| 2CL75A       | 14 | 5   | 51.0 | 0.5 | 2.0 | 80     |
| 2CL15KV/20mA | 15 | 20  | 45   | 2   | 2.0 | 100    |
| 2CL15KV/30mA | 15 | 30  | 45   | 2   | 2.0 | 100    |
| 2CL0515      | 15 | 50  | 16   | 5   | 2.0 | ---    |
| 2CL0515      | 15 | 50  | 26   | 5   | 2.0 | 100    |
| 2CL10-15     | 15 | 100 | 16   | 10  | 2.0 | ---    |
| 2CL10-15     | 15 | 100 | 26   | 10  | 2.0 | 100    |
| 2CL20-15     | 15 | 200 | 16   | 20  | 2.0 | ---    |
| 2CL20-15T    | 15 | 200 | 26   | 20  | 2.0 | 100/80 |
| CL01-15      | 15 | 350 | 16   | 30  | 5.0 | ---    |



# 2CL SERIES

High Voltage Rectifier Series

## SERIES ELECTRICAL SPECIFICATIONS (cont.)

|              |    |     |      |     |     |        |
|--------------|----|-----|------|-----|-----|--------|
| CL04-15      | 15 | 350 | 16   | 40  | 5.0 | ---    |
| CL01-15D     | 15 | 350 | 16   | 30  | 5.0 | ---    |
| CL03-15T     | 15 | 300 | 24   | 30  | 5.0 | 100/80 |
| CL05-15T     | 15 | 500 | 24   | 40  | 5.0 | 100/80 |
| 2CL75        | 16 | 5   | 60.0 | 0.5 | 2.0 | 80     |
| 2CL18KV/20mA | 18 | 20  | 50   | 2   | 2.0 | 100    |
| 2CL18KV/30mA | 18 | 30  | 50   | 2   | 2.0 | 100    |
| 2CL0518      | 18 | 50  | 20   | 5   | 2.0 | ---    |
| 2CL0518      | 18 | 50  | 30   | 5   | 2.0 | 100    |
| 2CL20-18T    | 18 | 200 | 35   | 20  | 2.0 | 100/80 |
| CL03-18T     | 18 | 300 | 35   | 30  | 5.0 | 100/80 |
| 2CL77        | 20 | 5   | 75.0 | 0.5 | 2.0 | 80     |
| 2CL20KV/20mA | 20 | 20  | 55   | 2   | 2.0 | 100    |
| 2CL20KV/30mA | 20 | 30  | 55   | 2   | 2.0 | 100    |
| 2CL0520      | 20 | 50  | 22   | 5   | 2.0 | ---    |
| 2CL0520      | 20 | 50  | 35   | 5   | 2.0 | 100    |
| 2CL10-20     | 20 | 100 | 35   | 10  | 2.0 | 100    |
| 2CL25KV/20mA | 25 | 20  | 60   | 2   | 2.0 | 100    |
| 2CL25KV/30mA | 25 | 30  | 60   | 2   | 2.0 | 100    |

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