

CLL4728A THRU CLL4764A

**SURFACE MOUNT
SILICON ZENER DIODE
1 WATT, 3.3 THRU 100 VOLTS**



MELF CASE



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CLL4728A Series Silicon Zener Diode is a high quality voltage regulator for use in surface mount industrial, commercial, entertainment and computer applications.

MARKING: CATHODE BAND

MAXIMUM RATINGS: ($T_A=25\text{ }^\circ\text{C}$)

Power Dissipation
Operating and Storage Junction Temperature
 V_Z Tolerance: Part number with "A" suffix
 V_Z Tolerance: Part number with "C" suffix
 V_Z Tolerance: Part number with "D" suffix

SYMBOL

P_D 1.0
 T_J, T_{stg} -65 to +200
 ± 5
 ± 2
 ± 1

UNITS

W
 $^\circ\text{C}$
%
%
%

ELECTRICAL CHARACTERISTICS: ($T_A=25\text{ }^\circ\text{C}$) $V_F=1.2\text{MAX}$ @ $I_F=200\text{mA}$ (for all types)

| TYPE | ZENER VOLTAGE | TEST CURRENT | MAXIMUM ZENER IMPEDANCE | | | MAXIMUM REVERSE CURRENT | | MAXIMUM CURRENT |
|----------|----------------|--------------|-------------------------|-------------------|------|-------------------------|------|-----------------|
| | $V_Z @ I_{ZT}$ | I_{ZT} | $Z_{ZT} @ I_{ZT}$ | $Z_{ZK} @ I_{ZK}$ | | $I_R @ V_R$ | | I_{ZM} |
| | V | mA | Ω | Ω | mA | μA | V | mA |
| CLL4728A | 3.3 | 76 | 10 | 400 | 1.0 | 100 | 1.0 | 1380 |
| CLL4729A | 3.6 | 69 | 10 | 400 | 1.0 | 100 | 1.0 | 1260 |
| CLL4730A | 3.9 | 64 | 9.0 | 400 | 1.0 | 50 | 1.0 | 1190 |
| CLL4731A | 4.3 | 58 | 9.0 | 400 | 1.0 | 10 | 1.0 | 1070 |
| CLL4732A | 4.7 | 53 | 8.0 | 500 | 1.0 | 10 | 1.0 | 970 |
| CLL4733A | 5.1 | 49 | 7.0 | 550 | 1.0 | 10 | 1.0 | 890 |
| CLL4734A | 5.6 | 45 | 5.0 | 600 | 1.0 | 10 | 2.0 | 810 |
| CLL4735A | 6.2 | 41 | 2.0 | 700 | 1.0 | 10 | 3.0 | 730 |
| CLL4736A | 6.8 | 37 | 3.5 | 700 | 1.0 | 10 | 4.0 | 660 |
| CLL4737A | 7.5 | 34 | 4.0 | 700 | 0.5 | 10 | 5.0 | 605 |
| CLL4738A | 8.2 | 31 | 4.5 | 700 | 0.5 | 10 | 6.0 | 550 |
| CLL4739A | 9.1 | 28 | 5.0 | 700 | 0.5 | 10 | 7.0 | 500 |
| CLL4740A | 10 | 25 | 7.0 | 700 | 0.25 | 10 | 7.6 | 454 |
| CLL4741A | 11 | 23 | 8.0 | 700 | 0.25 | 5.0 | 8.4 | 414 |
| CLL4742A | 12 | 21 | 9.0 | 700 | 0.25 | 5.0 | 9.1 | 380 |
| CLL4743A | 13 | 19 | 10 | 700 | 0.25 | 5.0 | 9.9 | 344 |
| CLL4744A | 15 | 17 | 14 | 700 | 0.25 | 5.0 | 11.4 | 304 |
| CLL4745A | 16 | 15.5 | 16 | 700 | 0.25 | 5.0 | 12.2 | 285 |
| CLL4746A | 18 | 14 | 20 | 750 | 0.25 | 5.0 | 13.7 | 250 |
| CLL4747A | 20 | 12.5 | 22 | 750 | 0.25 | 5.0 | 15.2 | 225 |
| CLL4748A | 22 | 11.5 | 23 | 750 | 0.25 | 5.0 | 16.7 | 205 |
| CLL4749A | 24 | 10.5 | 25 | 750 | 0.25 | 5.0 | 18.2 | 190 |
| CLL4750A | 27 | 9.5 | 35 | 750 | 0.25 | 5.0 | 20.6 | 170 |
| CLL4751A | 30 | 8.5 | 40 | 1000 | 0.25 | 5.0 | 22.8 | 150 |

R4 (21-April 2010)

CLL4728A THRU CLL4764A

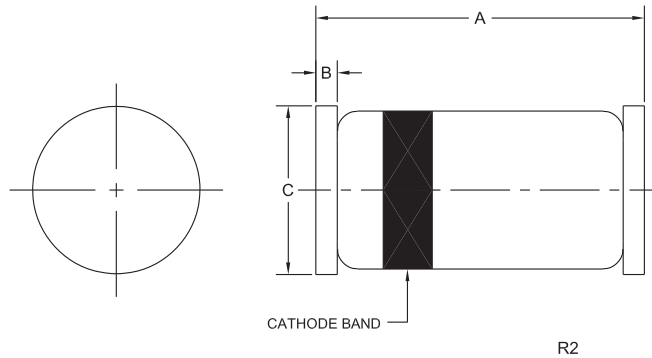
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SILICON ZENER DIODE
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ELECTRICAL CHARACTERISTICS - Continued: ($T_A=25\text{ }^\circ\text{C}$) $V_F=1.2\text{MAX}$ @ $I_F=200\text{mA}$ (for all types)

| TYPE | ZENER VOLTAGE | TEST CURRENT | MAXIMUM ZENER IMPEDANCE | | | MAXIMUM REVERSE CURRENT | | MAXIMUM CURRENT |
|----------|----------------|--------------|-------------------------|-------------------|------|-------------------------|------|-----------------|
| | $V_Z @ I_{ZT}$ | I_{ZT} | $Z_{ZT} @ I_{ZT}$ | $Z_{ZK} @ I_{ZK}$ | | $I_R @ V_R$ | | I_{ZM} |
| | V | mA | Ω | Ω | mA | μA | V | mA |
| CLL4752A | 33 | 7.5 | 45 | 1000 | 0.25 | 5.0 | 25.1 | 135 |
| CLL4753A | 36 | 7.0 | 50 | 1000 | 0.25 | 5.0 | 27.4 | 125 |
| CLL4754A | 39 | 6.5 | 60 | 1000 | 0.25 | 5.0 | 29.7 | 115 |
| CLL4755A | 43 | 6.0 | 70 | 1500 | 0.25 | 5.0 | 32.7 | 110 |
| CLL4756A | 47 | 5.5 | 80 | 1500 | 0.25 | 5.0 | 35.8 | 95 |
| CLL4757A | 51 | 5.0 | 95 | 1500 | 0.25 | 5.0 | 38.8 | 90 |
| CLL4758A | 56 | 4.5 | 110 | 2000 | 0.25 | 5.0 | 42.6 | 80 |
| CLL4759A | 62 | 4.0 | 125 | 2000 | 0.25 | 5.0 | 47.1 | 70 |
| CLL4760A | 68 | 3.7 | 150 | 2000 | 0.25 | 5.0 | 51.7 | 65 |
| CLL4761A | 75 | 3.3 | 175 | 2000 | 0.25 | 5.0 | 56 | 60 |
| CLL4762A | 82 | 3.0 | 200 | 3000 | 0.25 | 5.0 | 62.2 | 55 |
| CLL4763A | 91 | 2.8 | 250 | 3000 | 0.25 | 5.0 | 69.2 | 50 |
| CLL4764A | 100 | 2.5 | 350 | 3000 | 0.25 | 5.0 | 76 | 45 |

MELF CASE - MECHANICAL OUTLINE



MARKING: CATHODE BAND

| SYMBOL | DIMENSIONS | | | |
|---------|------------|-------|-------------|------|
| | INCHES | | MILLIMETERS | |
| | MIN | MAX | MIN | MAX |
| A | 0.185 | 0.217 | 4.70 | 5.50 |
| B | 0.012 | 0.022 | 0.30 | 0.56 |
| C (DIA) | 0.094 | 0.110 | 2.40 | 2.80 |

MELF (REV:R2)

R4 (21-April 2010)