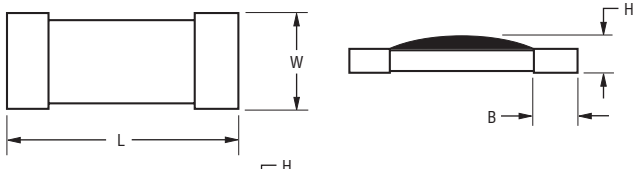


ChipGuard® MLC Series - ESD Protectors

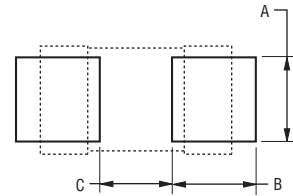
BOURNS®

Product Dimensions



Dim.	CGA0402MLC Series	CGA0603MLC Series
L	1.00 ± 0.10 (0.04 ± 0.004)	1.60 ± 0.10 (0.064 ± 0.004)
W	0.50 ± 0.10 (0.02 ± 0.004)	0.85 ± 0.15 (0.033 ± 0.006)
H	0.34 ± 0.10 (0.014 ± 0.004)	0.51 ± 0.05 (0.020 ± 0.002)
B	0.20 ± 0.15 (0.008 ± 0.006)	0.30 ± 0.20 (0.012 ± 0.008)

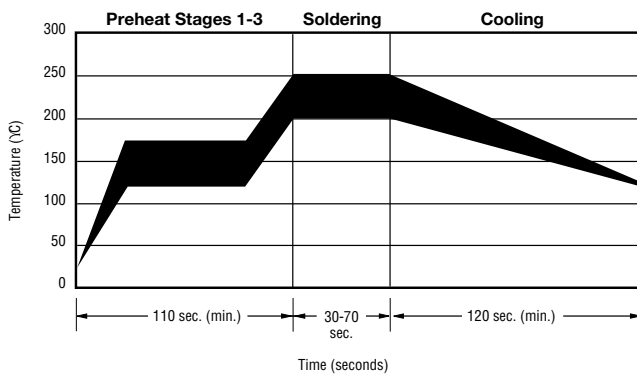
Recommended Pad Layout



Dim.	CGA0402MLC Series	CGA0603MLC Series
A	0.50 ± 0.1 (0.02 ± 0.004)	0.75 ± 0.1 (0.03 ± 0.004)
B	0.50 ± 0.1 (0.02 ± 0.004)	0.75 ± 0.1 (0.03 ± 0.004)
C	0.50 ± 0.1 (0.02 ± 0.004)	0.75 ± 0.1 (0.03 ± 0.004)

DIMENSIONS: $\frac{\text{MM}}{(\text{INCHES})}$

Solder Reflow Recommendations



A	Stage 1 Preheat	Ambient to Preheating Temperature	30 s to 60 s
B	Stage 2 Preheat	140 °C to 160 °C	60 s to 120 s
C	Stage 3 Preheat	Preheat to 200 °C	20 s to 40 s
D	Main Heating	200 °C 210 °C 220 °C 230 °C 240 °C 250 °C to 255 °C	60 s to 70 s 55 s to 65 s 50 s to 60 s 40 s to 50 s 30 s to 40 s 5 s
E	Cooling	200 °C to 100 °C	1 °C/s to 4 °C/s

- This product can be damaged by rapid heating, cooling or localized heating.
- Heat shocks should be avoided. Preheating and gradual cooling recommended.
- Excessive solder can damage the device. Print solder thickness of 150 to 200 um recommended.
- Solder gun tip temperature should be kept below 280 °C and should not touch the device directly. Contact should be less than 3 seconds. A solder gun under 30 watts is recommended.

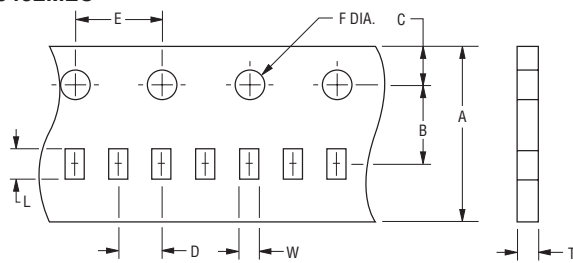
Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

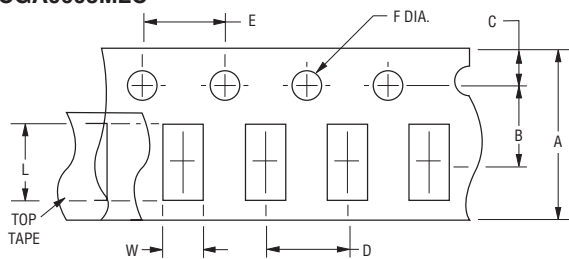
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Packaging Dimensions

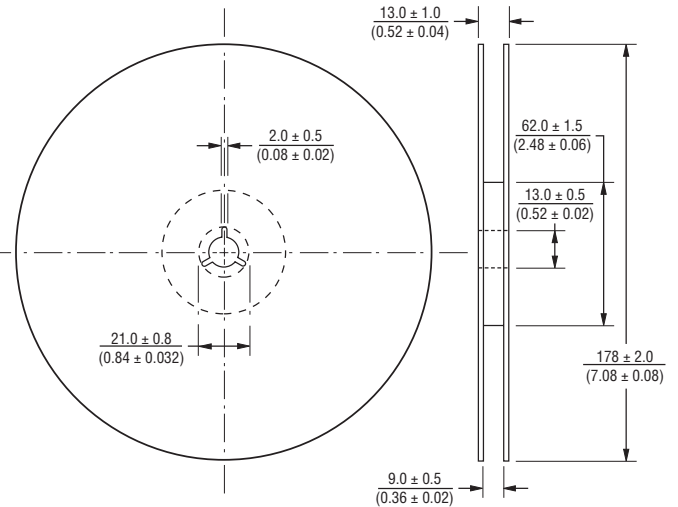
CGA0402MLC



CGA0603MLC



DIMENSIONS: $\frac{\text{MM}}{(\text{INCHES})}$



Dimension	CGA0402MLC Series	CGA0603MLC Series
A	$\frac{8.00 \pm 0.30}{(0.315 \pm 0.012)}$	$\frac{8.00 \pm 0.30}{(0.315 \pm 0.012)}$
B	$\frac{3.50 \pm 0.05}{(0.138 \pm 0.002)}$	$\frac{3.50 \pm 0.05}{(0.138 \pm 0.002)}$
C	$\frac{1.75 \pm 0.10}{(0.069 \pm 0.004)}$	$\frac{1.75 \pm 0.10}{(0.069 \pm 0.004)}$
D	$\frac{2.00 \pm 0.05}{(0.079 \pm 0.002)}$	$\frac{4.00 \pm 0.05}{(0.157 \pm 0.002)}$
E	$\frac{4.00 \pm 0.10}{(0.157 \pm 0.004)}$	$\frac{4.00 \pm 0.10}{(0.157 \pm 0.004)}$
F	$\frac{1.50 \pm 0.10}{(0.059 \pm 0.004)}$	$\frac{1.50 \pm 0.10}{(0.059 \pm 0.004)}$
L	$\frac{1.13 \pm 0.03}{(0.044 \pm 0.001)}$	$\frac{1.90 \pm 0.20}{(0.075 \pm 0.008)}$
W	$\frac{0.63 \pm 0.03}{(0.025 \pm 0.001)}$	$\frac{1.05 \pm 0.20}{(0.041 \pm 0.008)}$
T	$\frac{0.43 \pm 0.03}{(0.017 \pm 0.001)}$	$\frac{0.60 \pm 0.03}{(0.024 \pm 0.0012)}$

NOTES: TAPE MATERIAL IS PAPER.

TAPE THICKNESS IS: CGA0402MLC $\frac{0.48 \pm 0.03}{(0.019 \pm 0.0012)}$ CGA0603MLC $\frac{0.6 \pm 0.03}{(0.024 \pm 0.0012)}$

COVER TAPE ADHESION IS 35 ± 25 GRAMS.

How to Order

CG A 0n0n MLC - nn x

ChipGuard®
 Product Designator
 Automotive Series
 Package Option
 0402 = 0402 Package
 0603 = 0603 Package
 Multilayer Series Designator
 Maximum DC Working Voltage
 05 = 5 V
 12 = 12 V
 24 = 24 V
 Tape & Reel Packaging
 E = 5,000 pcs. per reel (0603 Package)
 G = 10,000 pcs. per reel (0402 Package)

REV. E 07/20

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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