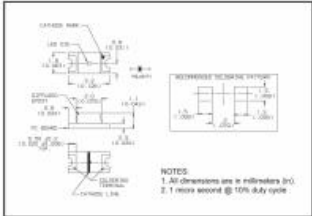




## Products

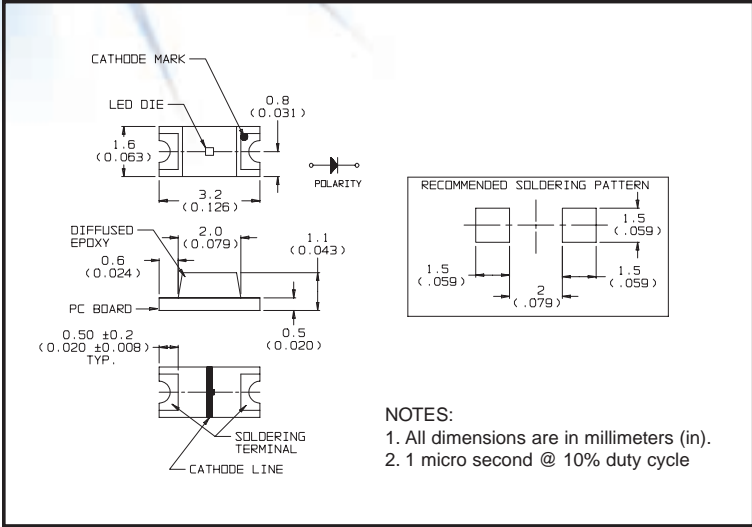
### LEDs

CML IT is a world leader in the manufacturing of LEDs and LED assemblies. CML offers a wide variety of products utilizing LEDs as a light source. Our line of discrete LEDs consists of both through hole and SMT products in all of the standard industry sizes including 3mm, 5mm, 0603, 0805, 1206, PLCC and any others. All CML-IT LEDs are available off-the-shelf in a wide variety of colors and intensities. Binning for through LEDs is one competitive service of CML Innovative Technologies, please contact us.

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|--|---|
|  <p>NOTES:<br/>1. All dimensions are in millimeters (M)<br/>2. 1 micro second @ 10% duty cycle</p> | <p><b>Part Number:</b> CMDA2AR7D1S<br/><b>Serial Number:</b> CMDA2<br/><b>LED Type:</b> SMT<br/><b>Industry Size:</b> 1206<br/><b>Metric Size:</b> 3.2 x 1.6 x 1.1 mm<br/><b>Output Color:</b> RED<br/><b>Epoxy:</b> WHITE DIFFUSED<br/><b>Peak Wave length (mA):</b> 637<br/><b>Minimum MCD:</b> 25<br/><b>Typical MCD:</b> 90<br/><b>Forward Volt (Typical):</b> 1.9<br/><b>Forward Volt (Max):</b> 2.4<br/><b>Rate Current (mA):</b> 20<br/><b>Viewing Angle (°):</b> 170<br/><b>Operating Temperature:</b> -0.352941176<br/><b>Storage Temperature:</b><br/><b>Power Dissipation:</b> 75<br/><b>Cont Forward Current Max:</b><br/><b>RoHS Status:</b> Yes</p> |
|--|---|

**CMDA2 Series HIGH BRIGHTNESS 1206 Package Size Surface Mount LED**

**DESCRIPTION AND FEATURES**



- Features**
- High brightness
  - Small size
  - Industry standard 1206 Footprint
  - Diffused optics
  - Top emitting
  - Compatible with IR solder profiles
  - Ideal for use with Light Pipes
  - Available in 8 mm tape on 7" diameter reel
  - Packaged 3,000 pieces per reel
- Applications**
- LCD backlighting
  - Push button backlighting
  - Front panel indicator
  - Symbol indicator
  - Microdisplays
  - Small message panel signage
- CAUTION:** CMDA2CB and CMDA2AG are Class 1 ESD sensitive per MIL-STD-1686. Please observe appropriate precautions during handling and processing.

**ELECTRO-OPTICAL CHARACTERISTICS AND RATINGS**

| Part Number | Output Color | Diffusion | Package Color | Test Current (mA) | Forward Voltage Typ. (V) | Forward Voltage Max. Typ. (V) | Luminous Intensity Min. (mcd) | Luminous Intensity Typ. (mcd) | Peak Wavelength (nm) | Viewing Angle (Degrees) |
|-------------|--------------|-----------|---------------|-------------------|--------------------------|-------------------------------|-------------------------------|-------------------------------|----------------------|-------------------------|
| CMDA2BY7D1S | Green        | Diffused  | White         | 20                | 2.1                      | 2.6                           | 16                            | 50                            | 570                  | 170                     |
| CMDA2DY7D1S | Amber        | Diffused  | White         | 20                | 1.9                      | 2.4                           | 25                            | 90                            | 595                  | 170                     |
| CMDA2AR7D1S | Red          | Diffused  | White         | 20                | 1.9                      | 2.4                           | 25                            | 90                            | 637                  | 170                     |
| CMDA2BA7D1S | Orange       | Diffused  | White         | 20                | 1.9                      | 2.4                           | 25                            | 90                            | 609                  | 170                     |
| CMDA2CB7D1S | Blue         | Diffused  | White         | 20                | 3.4                      | 3.9                           | 16                            | 55                            | 469                  | 140                     |
| CMDA2AG7D1S | Green        | Diffused  | White         | 20                | 3.4                      | 3.9                           | 40                            | 145                           | 520                  | 140                     |

**ABSOLUTE MAXIMUM RATINGS TO = 25 ° C**

| Part Number | Power Dissipation (mW) | Operating Temperature (°C) | Storage Temperature (°C) | Peak Forward Current Max. (See note 2) (mA) | Reverse Voltage (IR = 100 mA) (V) | Lead Solder Time at 230°C (Seconds) |
|-------------|------------------------|----------------------------|--------------------------|---|-----------------------------------|-------------------------------------|
| BY          | 52                     | -30 to +85                 | -40 to +85               | -   | 5                                 | 10                                  |
| DY          | 75                     | -30 to +85                 | -40 to +85               | 100   | 5                                 | 10                                  |
| AR          | 75                     | -30 to +85                 | -40 to +85               | 100   | 5                                 | 10                                  |
| BA          | 75                     | -30 to +85                 | -40 to +85               | 100   | 5                                 | 10                                  |
| CB          | 98                     | -30 to +85                 | -40 to +85               | 50  | 5                                 | 10                                  |
| AG          | 98                     | -30 to +85                 | -40 to +85               | 50  | 5                                 | 10                                  |

The model numbers listed above are standard off the shelf parts. For the user who may have a requirement calling for various color/electrical specifications, a part number can be determined by calling the factory.