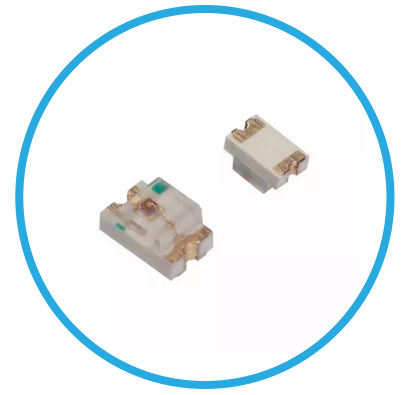


CMD17-21 Series

0805 Package Size

Surface Mount Technology LED



SMD LED available in three colors. Available in clear and diffused lens options and a 140 degree viewing angle.



Application

- Wearable and Portable Devices
- Automotive Features
- Navigations Systems
- Home and Smart Appliance
- Backlit Keypads
- Medical Devices
- Health Care Application
- Industrial Control Systems
- Status Indicator

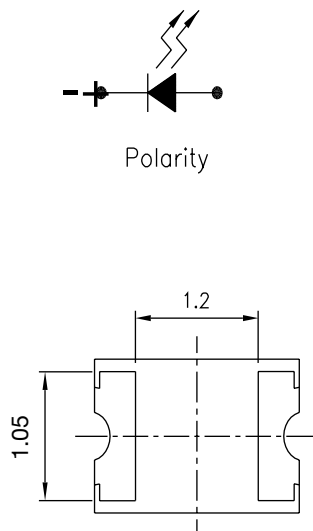
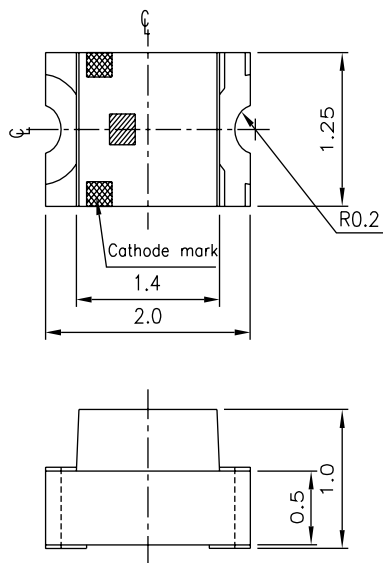
Key Features

- Surface mount technology
- Tape and reel packaged for high-speed auto insertion
- Convection and vapor-phase reflow compatible
- Compact form enables high density placement
- Viewing angle: 140°
- Packaged 4000 pieces per reel
- Lead Finish (Plating): Au
- Under Plating Material: NiCu
- Leading edge LED optoelectronic performance
- Consistent high brightness
- Exceptional Reliability
- Stringent process controls assure quality
- Extensive qualification testing to meet strictest requirements
- Designed to permit easy post-reflow solder joint inspection
- MSL Rating 2
- For custom LED color contact VCC
- RoHS and REACH Compliant

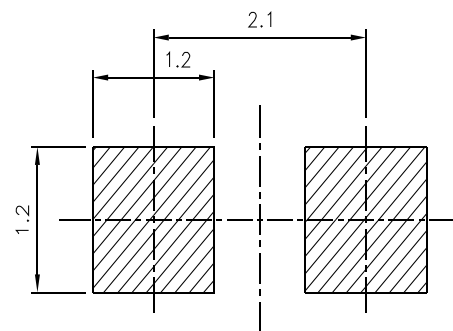
Ordering Data

Series	Emitted Color/Lens Color																
CMD17-21	SRC/TR8																
	<table border="1"> <tr> <td>SRC/TR8</td><td>Super Red/Clear</td></tr> <tr> <td>VRC/TR8</td><td>H.E. Red/Clear</td></tr> <tr> <td>VYC/TR8</td><td>Yellow/Clear</td></tr> <tr> <td>VGC/TR8</td><td>Green/Clear</td></tr> <tr> <td>UGC/TR8</td><td>Green/Clear</td></tr> <tr> <td>VRD/TR8</td><td>H.E. Red/Red Diffused</td></tr> <tr> <td>VYD/TR8</td><td>Yellow/Yellow Diffused</td></tr> <tr> <td>VGD/TR8</td><td>Green/Green Diffused</td></tr> </table>	SRC/TR8	Super Red/Clear	VRC/TR8	H.E. Red/Clear	VYC/TR8	Yellow/Clear	VGC/TR8	Green/Clear	UGC/TR8	Green/Clear	VRD/TR8	H.E. Red/Red Diffused	VYD/TR8	Yellow/Yellow Diffused	VGD/TR8	Green/Green Diffused
SRC/TR8	Super Red/Clear																
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VGC/TR8	Green/Clear																
UGC/TR8	Green/Clear																
VRD/TR8	H.E. Red/Red Diffused																
VYD/TR8	Yellow/Yellow Diffused																
VGD/TR8	Green/Green Diffused																

Product Dimensions



Recommended Soldering Pattern



Notes:

1. All dimensions are in mm
2. Tolerance is ± 0.1 mm unless otherwise noted
3. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.

Product Specifications

Electrical-Optical Characteristics

Part Number	Emitted Color	Lens Color	Test Current (mA)	Luminous Intensity		Forward Voltage		Peak Wavelength (nm)	Viewing Angle (degrees)
				Min. (mcd)	Typ. (mcd)	Typ. (V)	Max. (V)		
CMD17-21SRC/TR8	Super Red	Clear	20	10.0	21.0	1.7	2.4	660	140
CMD17-21VRC/TR8	H.E.Red	Clear	20	4.5	13.0	2.0	2.8	640	140
CMD17-21VYC/TR8	Yellow	Clear	20	5.0	12.0	2.0	2.8	585	140
CMD17-21VGC/TR8	Green	Clear	20	6.0	10.0	2.1	2.8	570	140
CMD17-21UGC/TR8	Green	Clear	20	8.0	15.0	2.1	2.8	570	140
CMD17-21VRD/TR8	H.E.Red	Red Diffused	20	3.0	6.0	2.0	2.8	640	140
CMD17-21VYD/TR8	Yellow	Yellow Diffused	20	2.5	4.0	2.0	2.8	505	140
CMD17-21VGD/TR8	Green	Green Diffused	20	4.0	7.0	2.1	2.8	570	140

Absolute Maximum Ratings

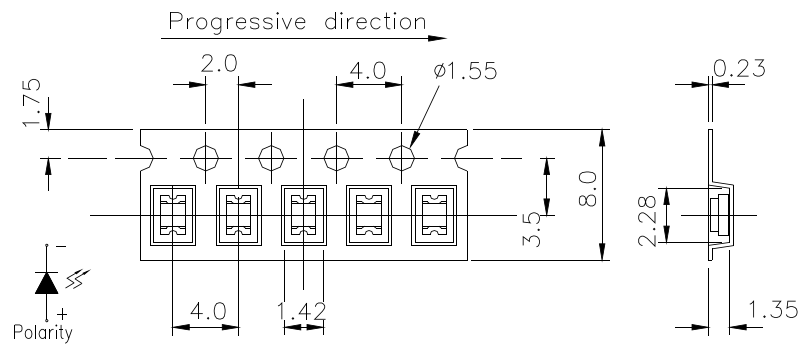
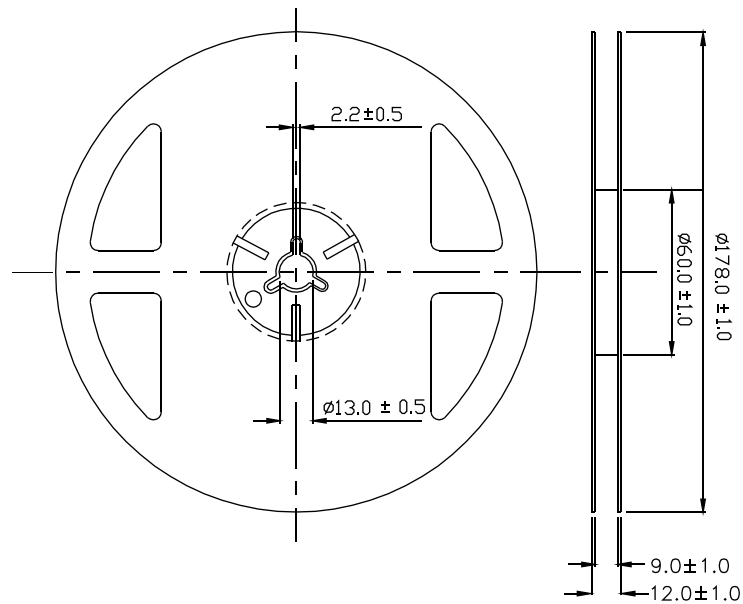
Emitted Color	Power Dissipation (mW)	Operating/Storage Temperature (°C)	Average Forward Current (mA)	Peak Forward Current (1 μ s @ 10% duty cycle)	Reverse Voltage (IR=100 μ A) (V)	Lead Solder Time at 260°C (Seconds)
Red	100	-40 to +85	30	150	5.0	5
Yellow	105	-40 to +85	30	150	5.0	5
Green	105	-40 to +85	30	150	5.0	5

Reliability Data

The reliability of products shall be satisfied with items listed below. Confidence level: 90%, LTPD: 10%

No	Items	Test Condition	Test Hours/Cycle	Sample Size	Ac/Re
1	Reflow Soldering	Temp: 260 ± 5°C Min. 5 sec	6 min	22 PCS	0/1
2	Temperature Cycle	H: +100°C 15 min ∫ 5 min L: -40°C 15 min	300 Cycles	22 PCS	0/1
3	Thermal Shock	H: +100°C 5 min ∫ 10 sec L: -10°C 5 min	300 Cycles	22 PCS	0/1
4	High Temperature Storage	Temp: 100°C	1000 Hrs	22 PCS	0/1
5	Low Temperature Storage	Temp: -40°C	1000 Hrs	22 PCS	0/1
6	DC Operating Life	IF=20mA	1000 Hrs	22 PCS	0/1
7	High Temperature/High Humidity	85°C/85%RH	1000 Hrs	22 PCS	0/1

Tape and Reel Specifications



Notes:

1. All dimensions are in mm
2. Tolerance is ± 0.1 mm unless otherwise noted
3. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.

Compliances and Approvals



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

VCC:

[CMD17-21SRC/TR8](#) [CMD17-21VYD/TR8](#) [CMD17-21SRC-100](#)