# **CML** INNOVATIVE TECHNOLOGIES WHERE INNOVATION COMES TO LIGHT

## CMD28-21 Series SMT LEDs

# DESCRIPTION AND FEATURES



### Surface Mount Technology

- Tape and reel packaged for high-speed autoinsertion.
- Convection and vapor-phase reflow compatible.
- Compactform enables high density placement.
- Gull Wing lead form
- Packaged 2000 pieces per reel.

### Leading Edge LED Optoelectronic Performance

Consistent high brightness.Low current types available.

### **Exceptional Reliability**

- Stringent process controls assure quality.
- Extensive qualification testing to meet
- strictest requirements.
- Designed to permit easy post-reflow solder joint inspection.

### ELECTRO-OPTICAL CHARACTERISTICS AND RATINGS

PART NUMBER	CMD28-21VGC/TR8	CMD28-21VYC/TR8	CMD28-21VRC/TR8	CMD28-21SRC/TR8	CMD28-21VRC/TR8/T1	CMD28-21VYC/TR8/T1	CMD28-21VGC/TR8/T1	CMD28-21SRC/TR8/T1
Output Color	Green	Yellow	Red	Red	H.E. Red	Yellow	Green	Red
Package Type	S ingle	S ingle	S ingle	S ingle				
Package Color	Clear	Clear	Clear	Clear	Clear	Clear	Clear	Clear
Test Current (mA)	20	20	20	20	1	1	1	1
Forward Voltage Typ. (V)	2.1	2.0	2.0	1.7	2.0	2.1	2.1	1.7
Forward Voltage Max. (V)	2.8	2.8	2.8	2.4	2.8	2.8	2.8	2.4
Luminous Intensity Min. (mcd)	1.0	3.5	1.5	11.0	0.1	0.25	0.1	1.0
Luminous Intensity Typ. (mcd)	5.5	6.0	3.0	17.0	0.16	0.4	0.16	1.6
Luminous Intensity Max. (mcd)	-		-	-	-	-	-	-
Peak Wavelength (nm)	570	585	640	660	640	585	570	660
Viewing Angle 20 1/2 (degrees)	150	150	150	150	150	150	150	150
Power Dissipation (mW)	105	105	100	100	105	105	105	100
Operating Temperature (°C)	-40 to +85	-40 to +85	-40 to +85	-40 to +85				
Storage Temperature (°C)	-40 to +85	-40 to +85	-40 to +85	-40 to +85				
Peak Forward Current Max. (1 s @ 10% duty cycle) (mA)	150	150	150	150	150	150	150	150
Reverse Voltage (IR=100 A) (V)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead Solder Time @ 260°C	5	5	5	5	5	5	5	5



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