



# CMD67-22 SERIES SMT LEDs

## Surface Mount Technology

### 3.20mm x 2.80mm



CMD67-22VRVGC/TR8  
CMD67-22SRUGC/TR8

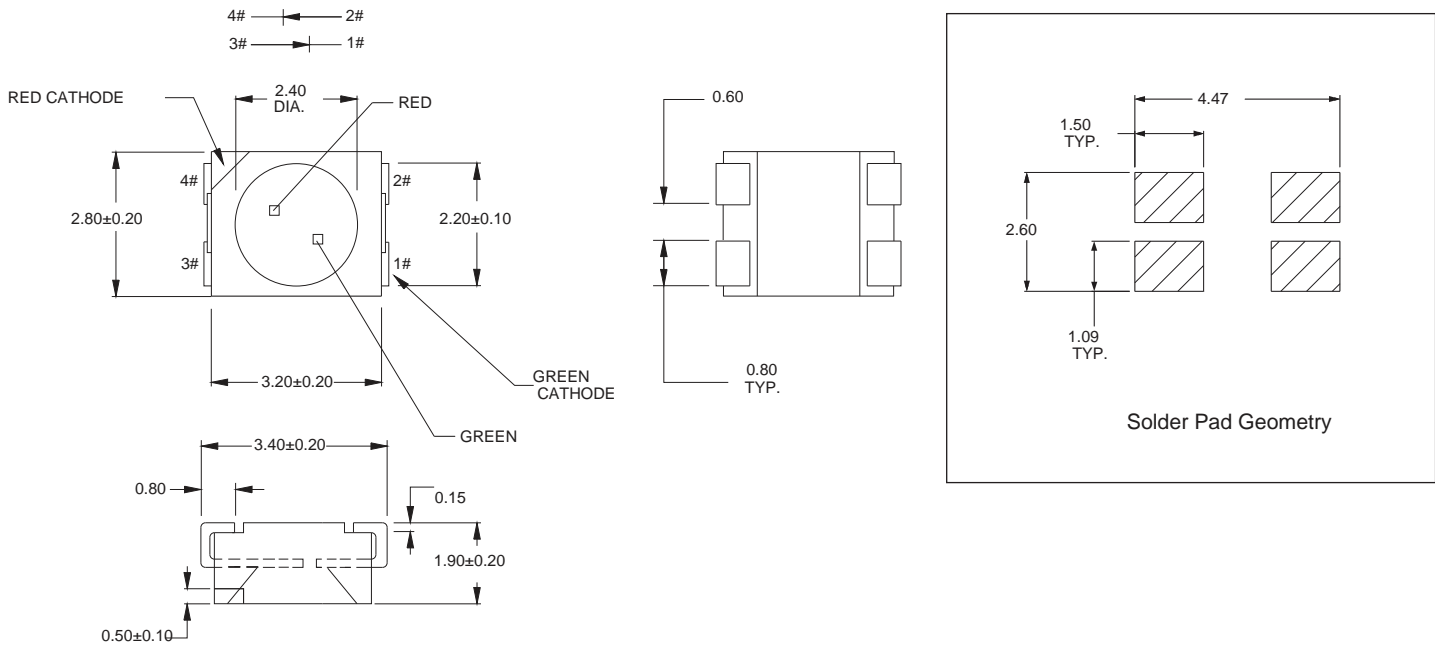
### Applications

- Industrial
- IoT
- People Movers
- Aerospace
- Transportation
- Flat backlight

### Key Features

- PLCC-4 package
- Suitable for vapor-phase reflow
- Compatible with automatic placement equipment
- Bi-Color (Red/Yellow Green)
- Dimensions: 3.20mm x 2.80mm
- Colorless clear window
- Pb-free
- Stringent process controls assure quality
- Designed to permit easy post-reflow solder joint inspection
- Ideal for backlight and light pipe application
- Tape and reel packaged for high-speed autoinsertion (8mm Tape)
- Packaged 2000 pieces per reel
- Wide viewing angle
- Low current requirement
- Convection and vapor-phase reflow compatible
- Compact form enables high density placement
- Integral lensing for narrow angle light dispersion

## Product Dimensions



All dimensions are in mm.

The tolerance unless mentioned is  $\pm 0.1$  mm.

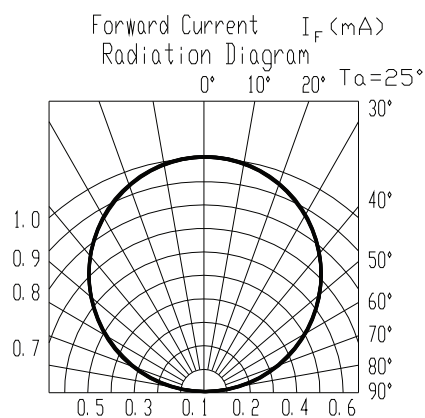
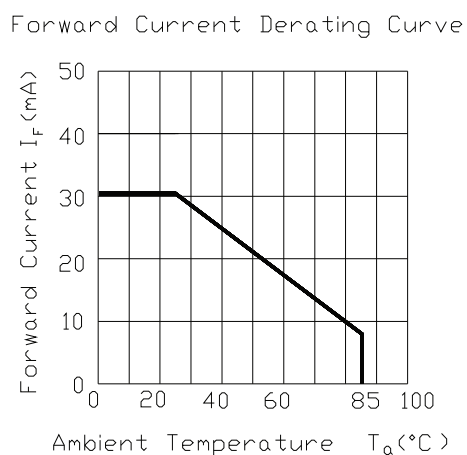
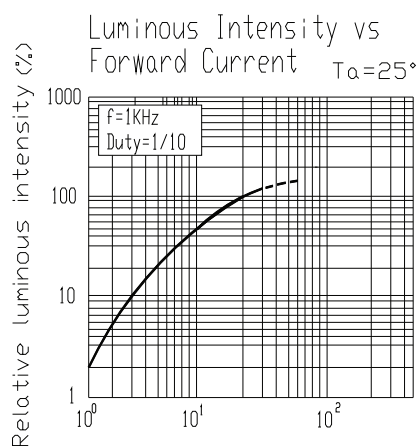
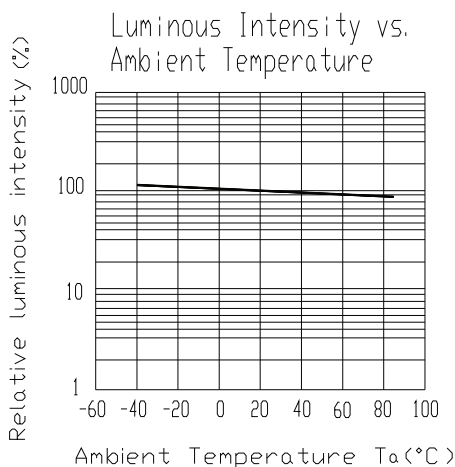
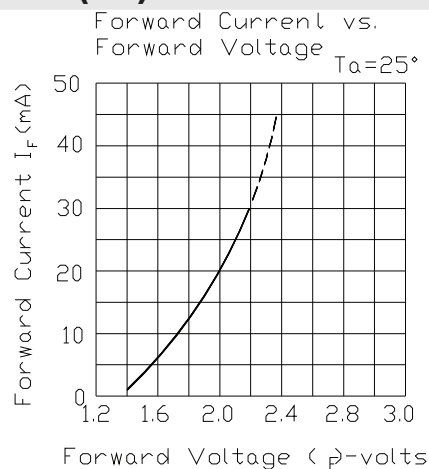
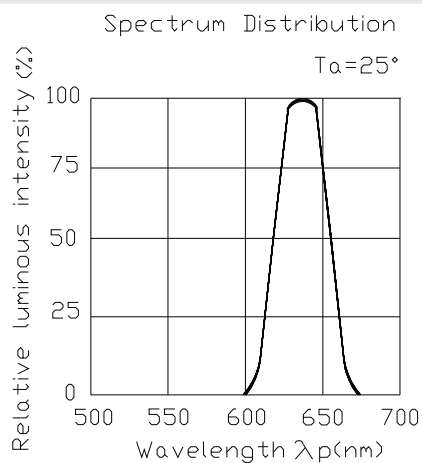
## Product Dimensions

PART NUMBER	CMD67-22VRVGC/TR8		CMD67-22SRUGC/TR8	
	Deep-Red	Yellow Green	Deep-Red	Yellow Green
Output Color	Deep-Red	Yellow Green	Deep-Red	Yellow Green
Package Color	Clear	Clear	Clear	Clear
Test Current (mA)	20	20	20	20
Forward Voltage Min. (V)	1.7	2.1	-	-
Forward Voltage Typ. (V)	-	-	1.7	2.1
Forward Voltage Max. (V)	2.4	2.4	2.4	2.4
Luminous Intensity Min. (mcd)	7.2	11.5	19.3	15.0
Luminous Intensity Typ. (mcd)	-	-	32.2	25.1
Luminous Intensity Max. (mcd)	28.5	45	-	-
Peak Wavelength (nm)	640	570	660	570
Viewing Angle $2\theta$ 1/2 (degrees)	120	120	120	120
Power Dissipation (mW)	100	100	110	100
Operating Temperature (°C)	-40 to +85	-40 to +85	-40 to +85	-40 to +85
Storage Temperature (°C)	-40 to +95	-40 to +95	-40 to +95	-40 to +95
Peak Forward Current Max. (1 $\mu$ s @ 10% duty cycle) (mA)	60	60	80	60
Reverse Voltage (IR=10 $\mu$ A) (V)	5.0	5.0	5.0	5.0
Reflow Soldering Time @ 260°C 9 (s)	10	10	10	10

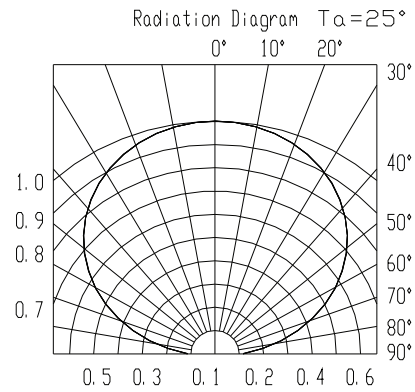
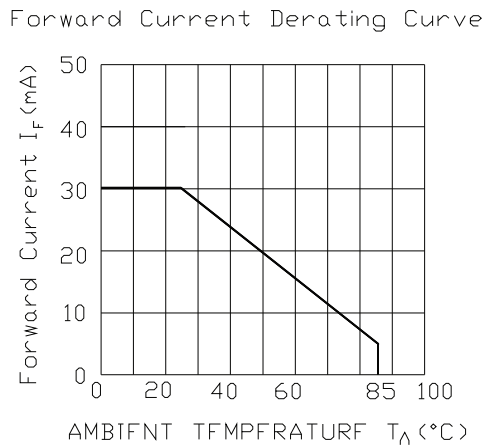
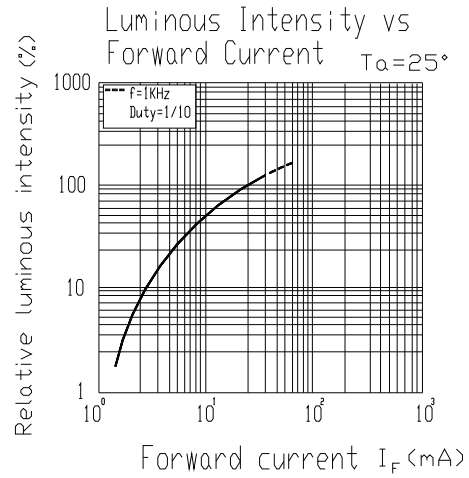
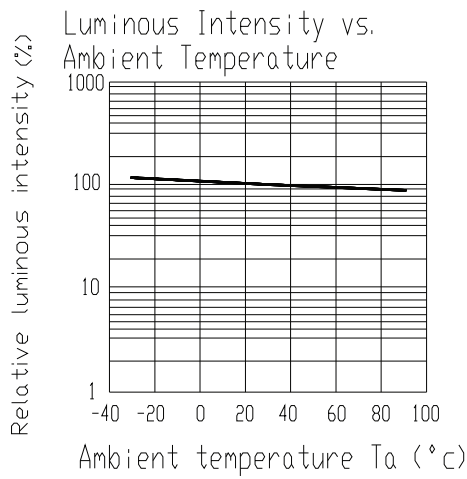
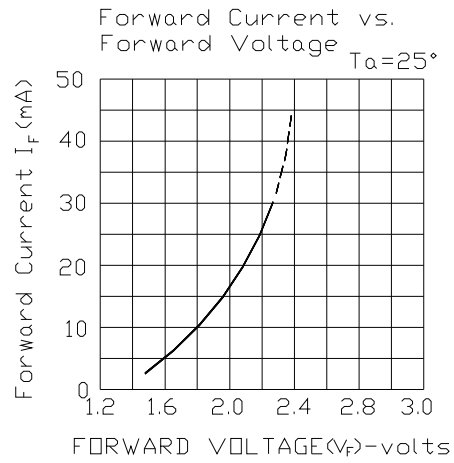
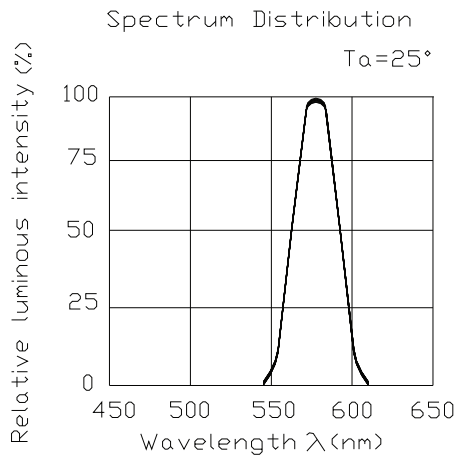
## Device Selection Guide

Chip		Emitted Color	Resin Color
Type	Material		
VR	GaAlAs/GaP	Deep-Red	Water Clear
VG	GaP	Yellow Green	
SR	GaAlAs	Deep-Red	
UG	GaP	Yellow Green	

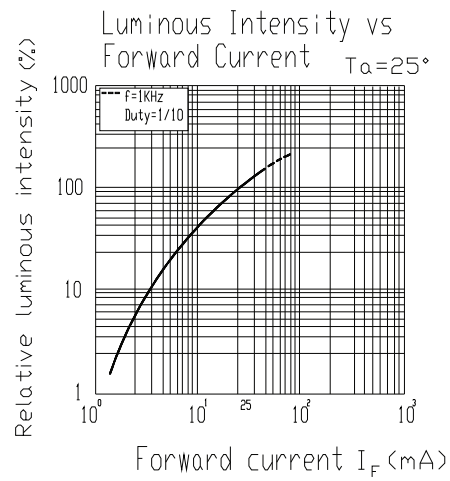
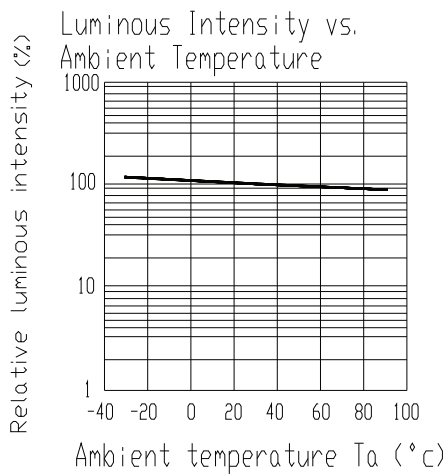
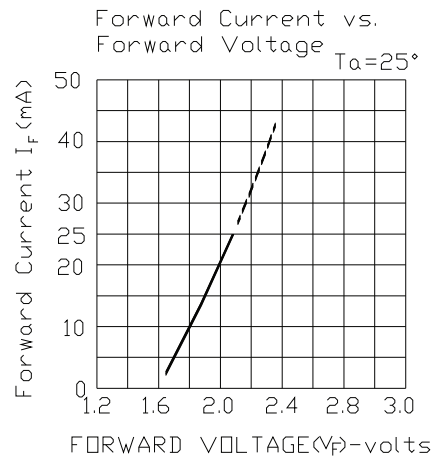
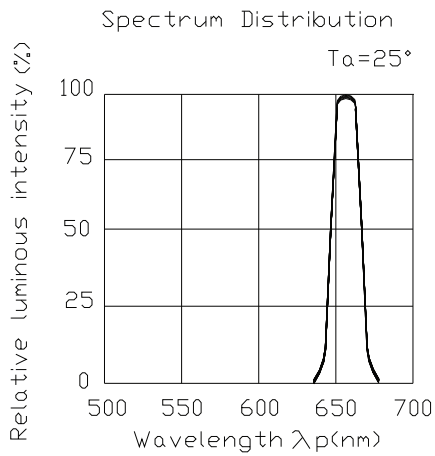
## Typical Electro-Optical Characteristics Curve (VR)



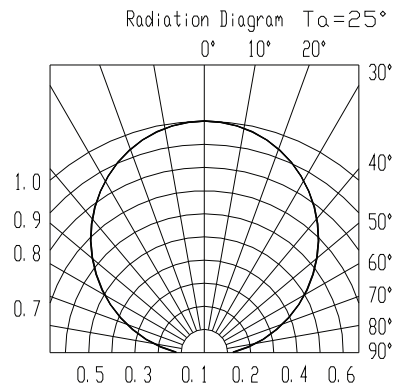
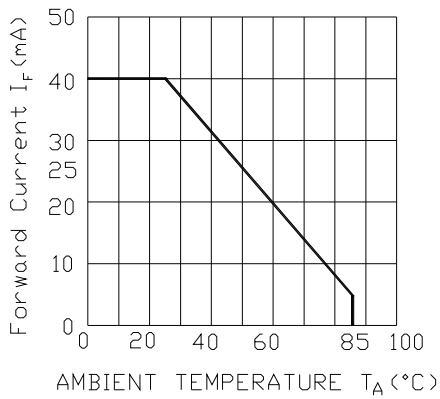
# Typical Electro-Optical Characteristics Curve (VG)



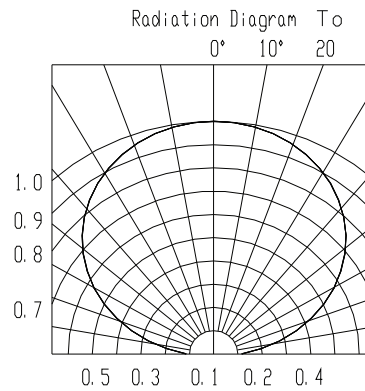
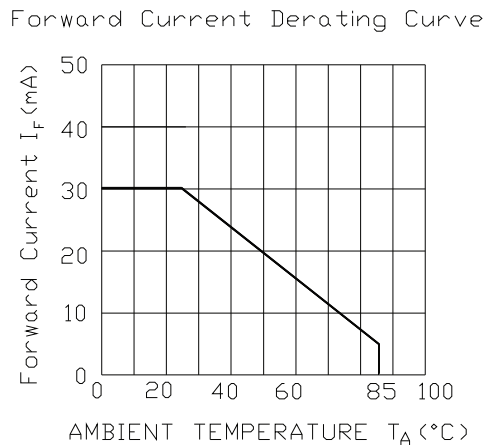
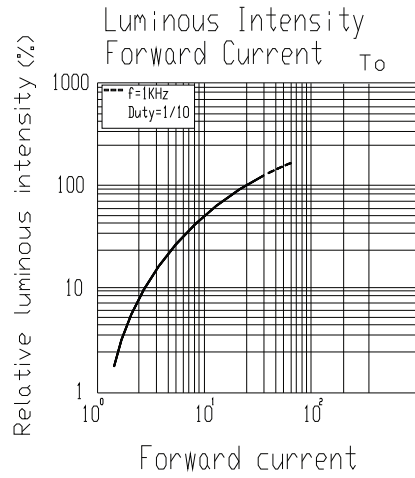
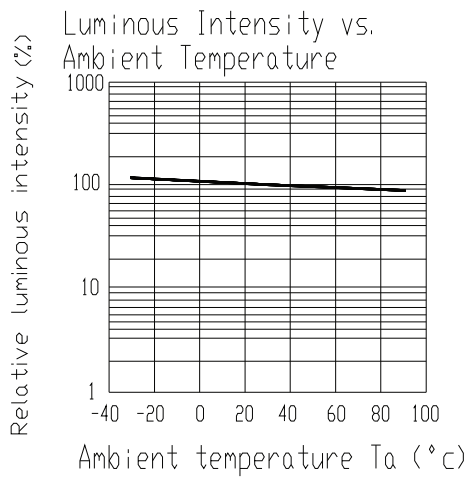
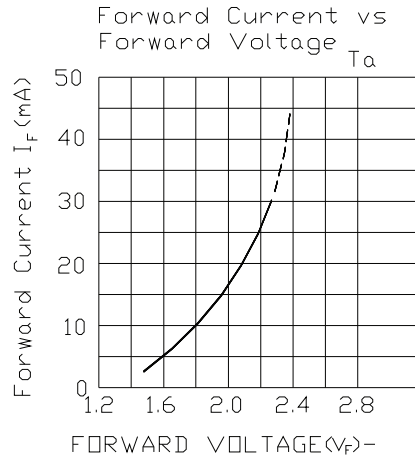
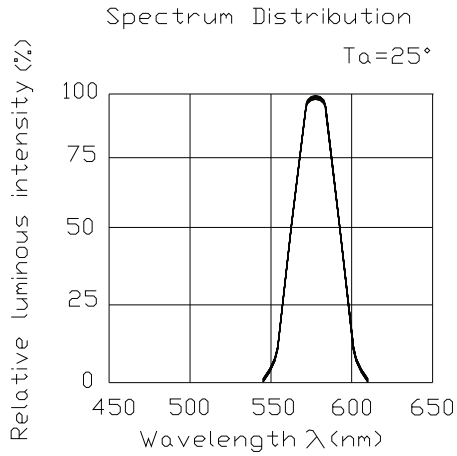
# Typical Electro-Optical Characteristics Curve (SR)



Forward Current Derating Curve



# Typical Electro-Optical Characteristics Curve (UG)



## Compliance and Approvals

