

PL008 Series SMD LED PLCC-2 Package

Features

- *PLCC-2 Package
3.2 x 2.8 x 1.9 mm
- *Superior Luminous Intensity
- *12 mm Tape
- *Low Current, Super & Ultra Bright,
and Bi-Color available
- *For use as Optical Indicator, Backlighting
- *For Optical Coupling into
Light Pipes/Lenses
- *White Diffused (WD) available
- *2000 pcs per Reel

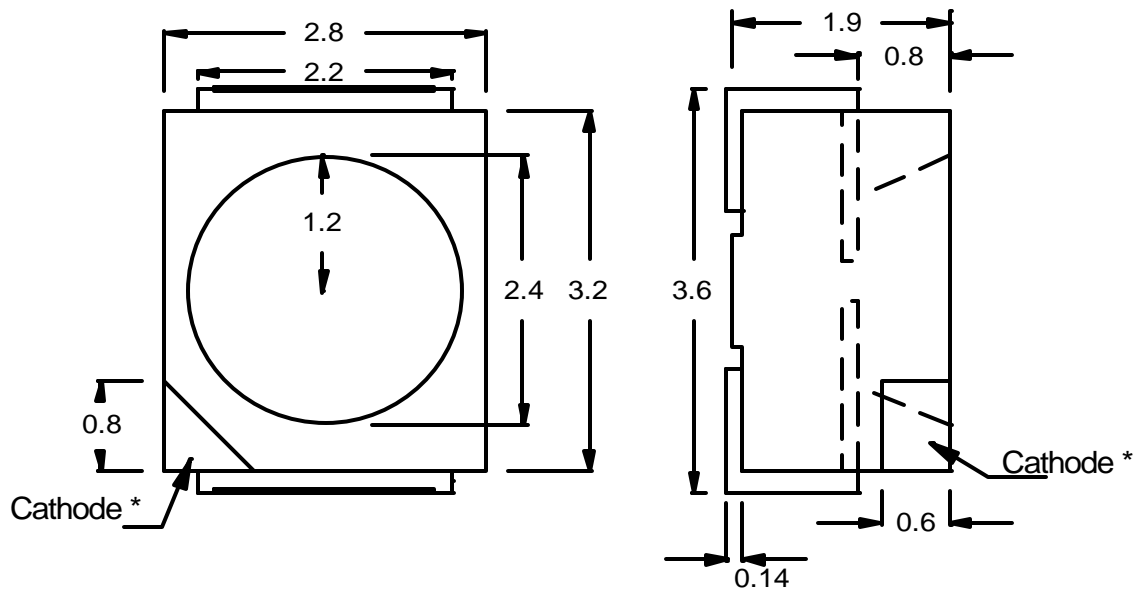
Absolute Maximum Ratings at T_A = 25 °C

Reverse Voltage (<100 mA).....(R19 3.0V) for all others 5.0V
Max Forward Current.....30mA
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)..... 100mA
Operating Temperature Range.....-25°C to + 85°C
Storage Temperature Range.....-25°C to +100°C
Reflow Soldering Temperature240° for 10 seconds

Electrical & Optical Characteristics at T_A = 25 °C

Part Number		Emitting Color	Material	Peak Wave Length	View Angle 2θ ½	Forward Voltage @20mA (V)		Luminous Intensity @20mA (mcd)	
						Typ	Max	Min	Typ
Color Transparent	Water Clear			(nm)	Deg				
PL008-CT-R24	PL008-WC-R24	Bright Red	GaP	700	120°	2.1	3.0	3.0	4.0
PL008-CT-R19	PL008-WC-R19	Dark Red	GaAsP	655		1.7	2.0	2.0	3.0
PL008-CT-R12	PL008-WC-R12	High Eff Red	GaAsP on GaP	635		2.1	3.0	14.0	24.0
PL008-CT-G13	PL008-WC-G13	High Eff Green	GaP	567		2.1	3.0	13.0	20.0
PL008-CT-Y01	PL008-WC-Y01	Yellow	GaAsP on GaP	585		2.1	3.0	11.0	18.0
PL008-CT-O12	PL008-WC-O12	Orange	GaAsP on GaP	635		2.1	3.0	14.0	24.0
PL008-CT-A04	PL008-WC-A04	Amber	GaAsP on GaP	611		2.1	3.0	14.0	23.0

Package Dimensions are in **Millimeters**. Tolerance is ± 0.25mm unless otherwise specified.



PL008 Series Low Current SMD LED PLCC-2 Package

Features

- *PLCC-2 Package
- 3.2 x 2.8 x 1.9 mm
- *Superior Luminous Intensity
- *12 mm Tape
- *Standard Colors available
- *Super & Ultra Bright available
- *For use as Optical Indicator, Backlighting
- *For Optical Coupling into Light Pipes/Lenses
- *White Diffused (WD) available
- *2000 pcs per Reel

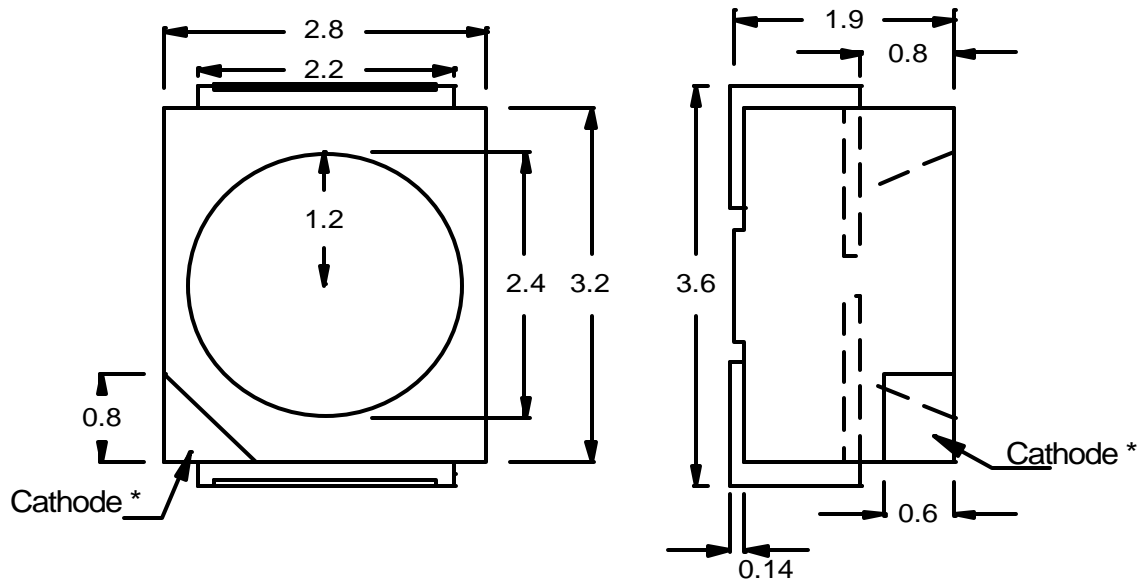
Absolute Maximum Ratings at T_A = 25 °C

Reverse Voltage (<100 mA).....	5.0V
Max Forward Current.....	30mA
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width).....	100mA
Operating Temperature Range.....	-25°C to + 85°C
Storage Temperature Range.....	-25°C to +100°C
Reflow Soldering Temperature.....	240° for 10 seconds

Electrical & Optical Characteristics at T_A = 25 °C

Part Number		Emitting Color	Material	Peak Wave Length	View Angle 2θ ½	Forward Voltage @2mA (V)		Luminous Intensity @2mA (mcd)	
						Typ	Max	Min	Typ
Color Transparent	Water Clear			(nm)	Deg				
PL008-CT-R12-LC	PL008-WC-R12-LC	High Eff Red	GaAsP on GaP	635	120°	1.8	2.2	4.0	6.0
PL008-CT-G13-LC	PL008-WC-G13-LC	High Eff Green	GaP	567		1.8	2.2	3.0	5.0
PL008-CT-Y01-LC	PL008-WC-Y01-LC	Yellow	GaAsP on GaP	585		1.8	2.2	3.0	4.4
PL008-CT-O12-LC	PL008-WC-O12-LC	Orange	GaAsP on GaP	635		1.8	2.2	4.0	6.0

Package Dimensions are in **Millimeters**. Tolerance is ± 0.25mm unless otherwise specified.



PL008 Series Super & Ultra Bright SMD LED PLCC-2 Package

Features

- *PLCC-2 Package 3.2 x 2.8 x 1.9 mm
- *Superior Luminous Intensity
- *12 mm Tape
- *Standard Colors, Low Current, Bi-Color, available
- *For use as Optical Indicator, Backlighting
- *For Optical Coupling into Light Pipes Lenses
- *White Diffused (WD) or Transparent(CT) available
- *2000 pcs. per Reel
- *Color Transparent Lens (CT)

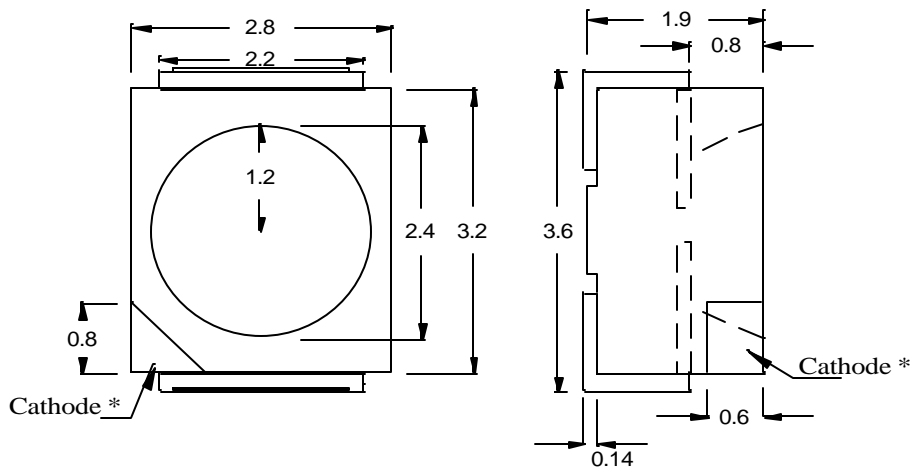
Absolute Maximum Ratings at TA = 25 °C

Reverse Voltage (<100 μA).....[InGaN on Sapphire (<50μ A) 5.0V].....	4.0V
D.C. Forward Current.....(InGaN on Sapphire 20mA).....	40mA
Pulse Current (1/10 Duty Cycle, 0.1ms Pulse Width).....	100mA
Operating Temperature Range....(AlGaInP on GaAs & TS AlGaInP on GaP).....	-25°C to + 85°C
Operating Temperature Range....(InGaN on Sapphire).....	-25°C to + 60°C
Storage Temperature Range.....	-25°C to +100°C
Reflow Soldering Temperature.....	260° for 5 seconds

Electrical & Optical Characteristics at TA = 25 °C

Lens Color Part Number	Material	Emitting Color	Peak Wave Length	View Angle 2θ ½	Forward Voltage @20mA (V)		Luminous Intensity @20mA (mcd)	
					Typ	Max	Min	Typ
Water Clear			nm	Deg				
PL008-WC-R22	GaAlAs on GaAs	Super Dark Red	660	120°	1.9	2.5	170	285
PL008-WC-R21	GaAlAs on GaAs	Super Dark Red	660	120°	1.7	2.2	85	140
PL008-WC-R16	TS AlGaInP on GaP	Ultra Red	642	120°	2.2	2.6	260	340
PL008-WC-R27	AlGaInP on GaAs	Ultra Red	639	120°	2.1	2.4	130	170
PL008-WC-R09	AlGaInP on GaAs	Ultra High Eff Red	632	120°	2.1	2.4	130	170
PL008-WC-R05	TS AlGaInP on GaP	Ultra Reddish Orange	621	120°	2.2	2.6	240	405
PL008-WC-R03	AlGaInP on GaAs	Ultra Reddish Orange	621	120°	2.1	2.4	130	170
PL008-WC-G19	AlGaInP on GaAs	Ultra Green Yellow	573	120°	2.1	2.4	130	170
PL008-WC-Y11	AlGaInP on GaAs	Ultra Yellow Orange	598	120°	2.1	2.4	130	170
PL008-WC-Y09	AlGaInP on GaAs	Ultra Yellow Orange	593	120°	2.1	2.4	210	385
PL008-WC-Y05	TS AlGaInP on GaP	Ultra Yellow Orange	592	120°	2.2	2.6	130	170
PL008-WC-A06	AlGaInP on GaAs	Ultra Amber	611	120°	2.1	2.4	130	170

Package Dimensions are in **Millimeters**. Tolerance is ± 0.1mm unless otherwise specified.



* Anode for R20, R21 & R22 (GaAlAs on GaAs)

PL008 Series Blue & Green SMD LED PLCC-2 Package

Features

- *PLCC-2 Package 3.2 x 2.8 x 1.9 mm
- *Fluorescence Type White Light
- *High Luminous Output
- *12 mm Tape
- *Others Standard Colors, Bi-Color, Super & Ultra Bright available
- *For use as Optical Indicator, Backlighting
- *For Optical Coupling into Light Pipes/Lenses
- *Water Clear (WD) available
- *2000 pcs per Reel

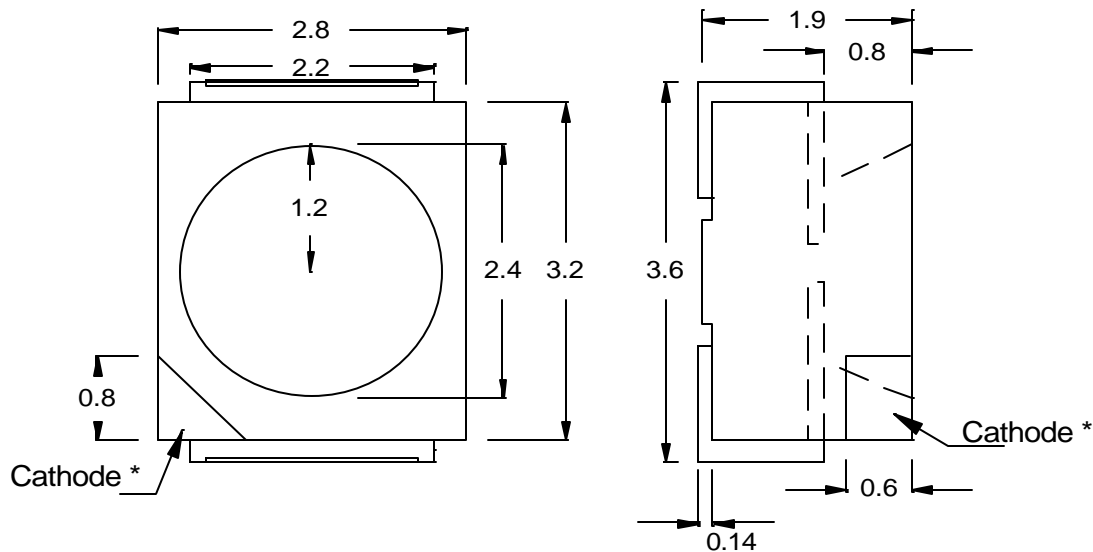
Absolute Maximum Ratings at T_A = 25 °C

Reverse Voltage (<100µA).....	5.0V
Max Forward Current	20mA
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width) (B05 80mA) for all others 100mA	
Operating Temperature Range.....	-30°C to + 80°C
Storage Temperature Range.....	-40°C to + 85°C
Reflow Soldering Temperature	230° for 10 seconds

Electrical & Optical Characteristics at T_A = 25 °C

Part Number	Emitting Color	Material	Peak Wave Length	View Angle 2θ ½	Forward Voltage @20mA (V)		Luminous Intensity @20mA (mcd)	
					Typ	Max	Min.	Typ.
Water Clear			(nm)	Deg				
PL008-WC-B01	Blue	GaN	428	120°	3.8	4.5	4.5	7.5
PL008-WC-B05	Ultra Blue	InGaN	465		3.5	4.0	30.0	55.0
PL008-WC-G02	Ultra Turquoise	InGaN	502		3.5	4.0	30.0	55.0
PL008-WC-G05	Ultra Pure Green	InGaN	523		3.2	3.9	30.0	55.0

Package Dimensions are in **Millimeters**. Tolerance is ± 0.1mm unless otherwise specified.



ATTENTION!

OBSERVE PRECAUTION FOR HANDLING ELECTRO STATIC SENSITIVE DEVICES

Precautions:

These products are sensitive to static electricity; care must be taken when handling. Static shocks will cause damage and possible destruction of these products.

PL008 Series White SMD LED PLCC-2 Package

Features

- *PLCC-2 Package 3.2 x 2.8 x 1.9 mm
- *Fluorescence Type White Light
- *High Luminous Output
- *12 mm Tape
- *Others Standard Colors, Bi-Color, Super & Ultra Bright available
- *For use as Optical Indicator, Backlighting
- *For Optical Coupling into Light Pipes/Lenses
- *Water Clear (WC) available
- *2000 pcs per Reel

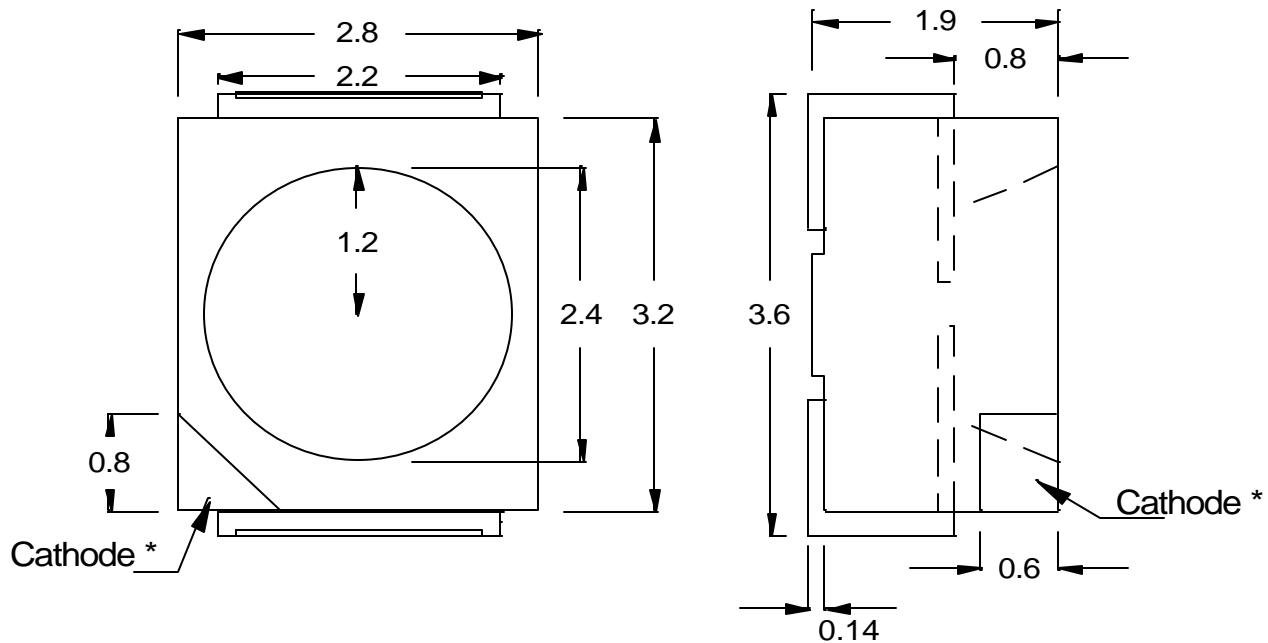
Absolute Maximum Ratings at T_A = 25 °C

Reverse Voltage (<100 mA).....	5.0V
Max Forward Current.....	20mA
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width).....	100mA
Operating Temperature Range	-25°C to + 85°C
Storage Temperature Range	-25°C to +100°C
Reflow Soldering Temperature	240° for 10 seconds

Electrical & Optical Characteristics at T_A = 25 °C

Part Number	Emitting Color	Material	Chromaticity @10mA	View Angle 2θ ½	Forward Voltage @20mA (V)		Luminous Intensity @20mA (mcd)	
					Typ	Max	Min	Typ
White Diffused			x/y	Deg				
PL008-WD-W03	Super White	InGaN on Sapphire	0.29/0.30	120°	3.6	4.0	100	134

Package Dimensions are in **Millimeters**. Tolerance is ± 0.25mm unless otherwise specified.



ATTENTION!

OBSERVE PRECAUTION FOR HANDLING ELECTRO STATIC SENSITIVE DEVICES

Precautions:

These products are sensitive to static electricity; care must be taken when handling. Static shocks will cause damage and possible destruction of these products.

PL008 Series Bi-Color SMD LED PLCC-2 Package

Features

- *PLCC-2 Package 3.2 x 2.8 x 1.9 mm
- *12 mm Tape
- *Other Standard Colors, Low Current, Super & Ultra Bright available
- *High Light Output
- *IC Compatible
- *Reliable and Rugged
- *White Diffused (WD) available
- *2000 pcs per Reel

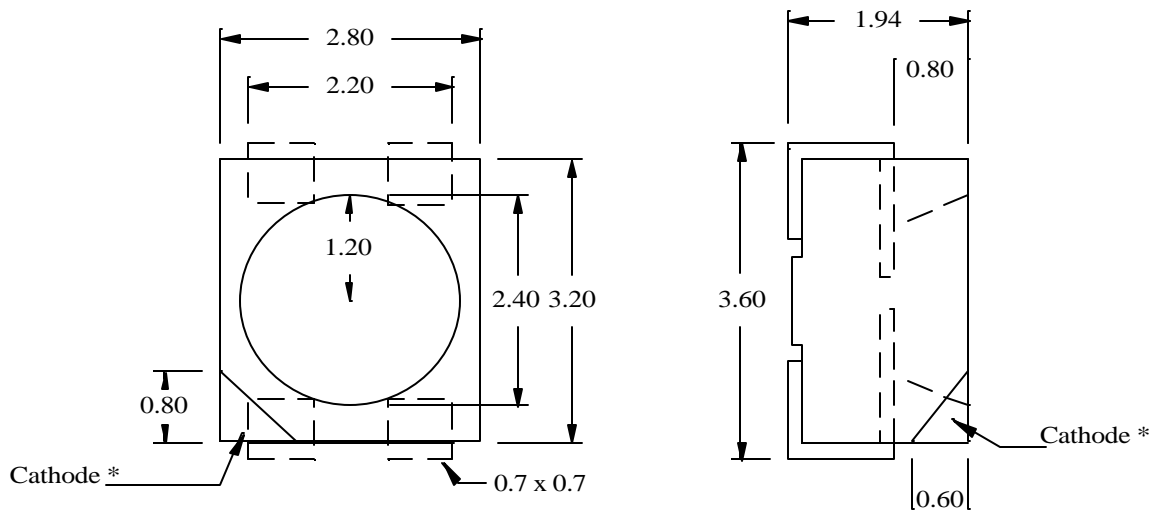
Absolute Maximum Ratings at T_A = 25 °C

Reverse Voltage (<100μA).....	5.0V
Max Forward Current.....	30mA
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width).....	100mA
Operating Temperature Range.....	-25°C to + 85°C
Storage Temperature Range.....	-25°C to + 100°C
Reflow Soldering Temperature.....	240° for 10 seconds

Electrical & Optical Characteristics at T_A = 25 °C

Part Number	Emitting Color	Material	Peak Wave Length	View Angle 2θ ½	Forward Voltage @20mA (V)		Luminous Intensity @20mA (mcd)
					Typ	Max	Typ
Water Clear			(nm)	Deg			
PL008-WC-RG2413	Bright Red/High Eff Green	GaP/GaP	700/567	120°	2.1/2.1	3.0	7.0/18.0
PL008-WC-RG2013	Super Dark Red/High Eff Green	GaAlAs on GaAs/GaP	660/567		1.7/2.1	2.6	43.0/18.0
PL008-WC-RG1213	High Eff Red/High Eff Green	GaAsP on GaP/GaP	635/567		2.1/2.1	3.0	20.0/18.0
PL008-WC-RY2401	Bright Red/Yellow	GaP/GaAsP on GaP	700/585		2.1/2.1	3.0	7.0/18.0
PL008-WC-RY1201	High Eff Red/Yellow	GaAsP on GaP/GaAsP on GaP	635/585		2.1/2.1	3.0	20.0/18.0
PL008-WC-GY1301	High Eff Green /Yellow	GaP/GaAsP on GaP	567/585		2.1/2.2	3.0	18.0/18.0
PL008-WC-GO1312	High Eff Green/Orange	GaP/GaAsP on GaP	567/635		2.1/2.1	3.0	18.0/18.0
PL008-WC-GA1302	High Eff Green/Amber	GaP/GaAsP on GaP	567/610		2.1/2.1	3.0	18.0/20.0

Package Dimensions are in **Millimeters** . Tolerance is ± 0.1mm unless otherwise specified.



* Anode for R20, R21 & R22 (GaAlAs on GaAs)