

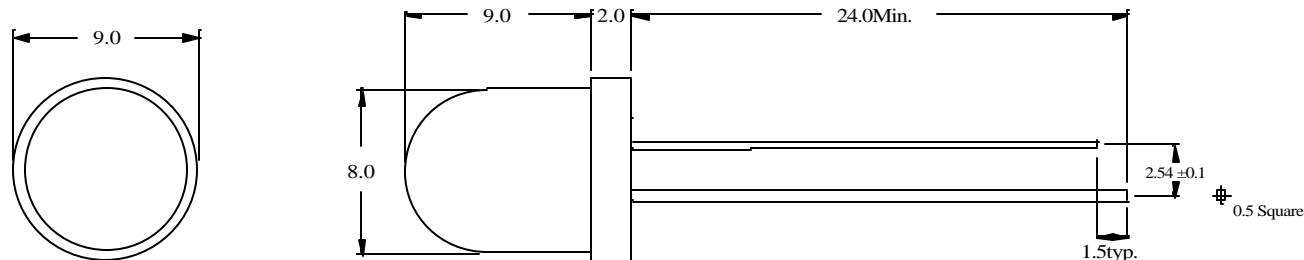
## PL22 Series 8mm LED

<b>Features</b> *Flange *Available in Color, White Diffused (WD), Color Transparent (CT), and Water Clear (WC)	<b>Absolute Maximum Ratings at T<sub>A</sub> = 25 °C</b>	
	Reverse Voltage (<100μA).....	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
	Soldering Temperature (1.6mm below body).....	260° for 5 seconds

### Electrical & Optical Characteristics at T<sub>A</sub> = 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 Diffused	White Diffused			(nm)	Deg	Typ	Max	Min	Typ
PL22-CDR24	PL22-WDR24	Bright Red	GaP	700	40°	2.1	3.0	2.5	4.1
PL22-CDR12	PL22-WDR12	Hi Eff Red	GaAsP on GaP	635		2.1	3.0	14.0	23.2
PL22-CDG13	PL22-WDG13	Green	GaP	567		2.1	3.0	12.0	20.0
PL22-CDY01	PL22-WDY01	Yellow	GaAsP on GaP	585		2.1	3.0	9.9	16.4
PL22-CDA02	PL22-WDA02	Amber	GaAsP on GaP	610		2.1	3.0	14.0	23.2
PL22-CDO12	PL22-WDO12	Orange	GaAsP on GaP	635		2.1	3.0	14.0	23.2
Color Transparent	Water Clear			(nm)		Deg	Typ	Max	Min
PL22-CTR24	PL22-WCR24	Bright Red	GaP	700	32°	2.1	3.0	8.3	13.7
PL22-CTR12	PL22-WCR12	Hi Eff Red	GaAsP on GaP	635		2.1	3.0	47.4	78.8
PL22-CTG13	PL22-WCG13	Green	GaP	567		2.1	3.0	41.0	68.2
PL22-CTY01	PL22-WCY01	Yellow	GaAsP on GaP	585		2.1	3.0	33.6	55.8
PL22-CTA02	PL22-WCA02	Amber	GaAsP on GaP	610		2.1	3.0	47.4	78.8
PL22-CTO12	PL22-WCO12	Orange	GaAsP on GaP	635		2.1	3.0	47.4	78.8

Package Dimensions are in **Millimeters**. Tolerance is ± 0.25mm unless otherwise specified.  
An Epoxy Meniscus may extend about 1 mm. down the leads.



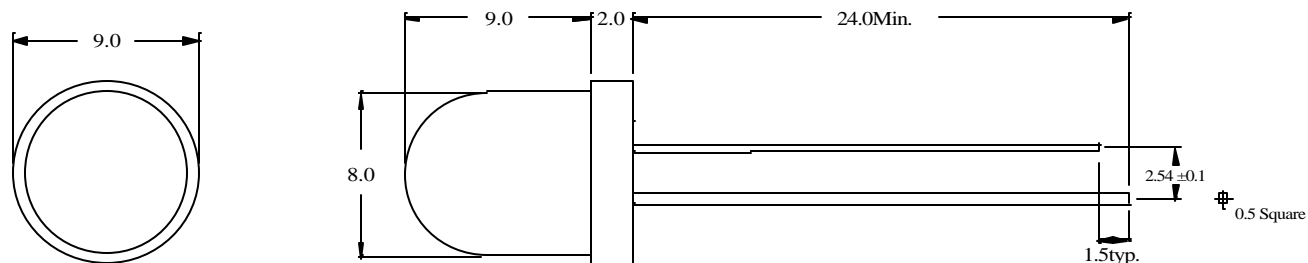
## PL22 Series 5 Volt 8mm LED

<b>Features</b> *Flange *Available in Color, White Diffused (WD), Color Transparent (CT), and Water Clear (WC) *Available with Integrated Current Limiting Resistor for 12V operation	<b>Absolute Maximum Ratings at T<sub>A</sub> = 25 °C</b>
	Reverse Voltage (<100µA).....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
	Soldering Temperature (1.6mm below body).....260° for 5 seconds

### Electrical & Optical Characteristics at T<sub>A</sub> = 25 °C

Part Number		Emitting Color	Material	Peak Wave Length	View Angle 2θ ½	Forward Voltage @20mA (V)		Luminous Intensity @20mA (mcd)	
Color Diffused	White Diffused			(nm)	Deg	Typ	Max	Min	Typ
PL22-CDR24-5V	PL22-WDR24-5V	Bright Red	GaP	700	40°	2.1	3.0	2.5	4.1
PL22-CDR12-5V	PL22-WDR12-5V	Hi Eff Red	GaAsP on GaP	635		2.1	3.0	14.0	23.2
PL22-CDG13-5V	PL22-WDG13-5V	Green	GaP	567		2.1	3.0	12.0	20.0
PL22-CDY01-5V	PL22-WDY01-5V	Yellow	GaAsP on GaP	585		2.1	3.0	9.9	16.4
PL22-CDA02-5V	PL22-WDA02-5V	Amber	GaAsP on GaP	610		2.1	3.0	14.0	23.2
PL22-CDO12-5V	PL22-WDO12-5V	Orange	GaAsP on GaP	635		2.1	3.0	14.0	23.2
PL22-CTR24-5V	PL22-WCR24-5V	Bright Red	GaP	700		32°	2.1	3.0	8.3
PL22-CTR12-5V	PL22-WCR12-5V	Hi Eff Red	GaAsP on GaP	635	2.1		3.0	47.4	78.8
PL22-CTG13-5V	PL22-WCG13-5V	Green	GaP	567	2.1		3.0	41.0	68.2
PL22-CTY01-5V	PL22-WCY01-5V	Yellow	GaAsP on GaP	585	2.1		3.0	33.6	55.8
PL22-CTA02-5V	PL22-WCA02-5V	Amber	GaAsP on GaP	610	2.1		3.0	47.4	78.8
PL22-CTO12-5V	PL22-WCO12-5V	Orange	GaAsP on GaP	635	2.1		3.0	47.4	78.8

Package Dimensions are in **Millimeters**. Tolerance is ± 0.25mm unless otherwise specified.  
An Epoxy Meniscus may extend about 1 mm. down the leads.



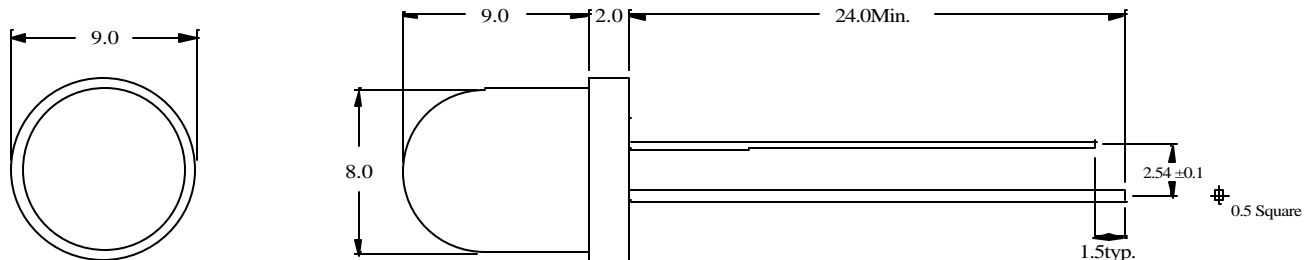
## PL22 Series 12 Volt 8mm LED

<b>Features</b> *Flange *Available in Color, White Diffused (WD), Color Transparent (CT), and Water Clear (WC) *Standard and Low Current Available *Available with Integrated Current Limiting Resistor for 5V operation	<b>Absolute Maximum Ratings at T<sub>A</sub> = 25 °C</b>
	Reverse Voltage (<100µA).....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
	Soldering Temperature (1.6mm below body).....260° for 5 seconds

### Electrical & Optical Characteristics at T<sub>A</sub> = 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 Diffused	White Diffused			(nm)	Deg	Typ	Max	Min	Typ
PL22-CDR24-12V	PL22-WDR24-12V	Bright Red	GaP	700	40°	12.0	15.0	2.5	4.1
PL22-CDR12-12V	PL22-WDR12-12V	Hi Eff Red	GaAsP on GaP	635		12.0	15.0	14.0	23.2
PL22-CDG13-12V	PL22-WDG13-12V	Green	GaP	567		12.0	15.0	12.0	20.0
PL22-CDY01-12V	PL22-WDY01-12V	Yellow	GaAsP on GaP	585		12.0	15.0	9.9	16.4
PL22-CDA02-12V	PL22-WDA02-12V	Amber	GaAsP on GaP	610		12.0	15.0	14.0	23.2
PL22-CDO12-12V	PL22-WDO12-12V	Orange	GaAsP on GaP	635		12.0	15.0	14.0	23.2
Color Transparent	Water Clear			(nm)		Deg	Typ	Max	Min
PL22-CTR24-12V	PL22-WCR24-12V	Bright Red	GaP	700	32°	12.0	15.0	8.3	13.7
PL22-CTR12-12V	PL22-WCR12-12V	Hi Eff Red	GaAsP on GaP	635		12.0	15.0	47.4	78.8
PL22-CTG13-12V	PL22-WCG13-12V	Green	GaP	567		12.0	15.0	41.0	68.2
PL22-CTY01-12V	PL22-WCY01-12V	Yellow	GaAsP on GaP	585		12.0	15.0	33.6	55.8
PL22-CTA02-12V	PL22-WCA02-12V	Amber	GaAsP on GaP	610		12.0	15.0	47.4	78.8
PL22-CTO12-12V	PL22-WCO12-12V	Orange	GaAsP on GaP	635		12.0	15.0	47.4	78.8

Package Dimensions are in **Millimeters** . Tolerance is ± 0.25mm unless otherwise specified.  
An Epoxy Meniscus may extend about 1 mm. down the leads.



## PL22 Series Low Current 8mm LED

### Features

- \*Flange
- \*Available in Color, White Diffused (WD), Color Transparent (CT), and Water Clear (WC)

### Absolute Maximum Ratings at T<sub>A</sub> = 25 °C

Reverse Voltage (<100μA).....	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
Soldering Temperature (1.6mm below body).....	260° for 5 seconds

### Electrical & Optical Characteristics at T<sub>A</sub> = 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 Diffused	White Diffused			(nm)	Deg	Typ	Max	Min	Typ
PL22-CDR12-LC	PL22-WDR12-LC	Hi Eff Red	GaAsP on GaP	635	40°	1.8	2.2	1.5	2.6
PL22-CDG13-LC	PL22-WDG13-LC	Green	GaP	567		1.8	2.2	1.3	2.2
PL22-CDY01-LC	PL22-WDY01-LC	Yellow	GaAsP on GaP	585		1.8	2.2	1.1	1.8
PL22-CDO12-LC	PL22-WDO12-LC	Orange	GaAsP on GaP	635		1.8	2.2	1.5	2.6
Color Transparent	Water Clear			(nm)	Deg	Typ	Max	Min	Typ
PL22-CTR12-LC	PL22-WCR12-LC	Hi Eff Red	GaAsP on GaP	635	32°	1.8	2.2	5.3	8.8
PL22-CTG13-LC	PL22-WCG13-LC	Green	GaP	567		1.8	2.2	4.5	7.6
PL22-CTY01-LC	PL22-WCY01-LC	Yellow	GaAsP on GaP	585		1.8	2.2	3.7	6.2
PL22-CTO12-LC	PL22-WCO12-LC	Orange	GaAsP on GaP	635		1.8	2.2	5.3	8.8

Package Dimensions are in **Millimeters** . Tolerance is ± 0.25mm unless otherwise specified.  
An Epoxy Meniscus may extend about 1 mm. down the leads.

