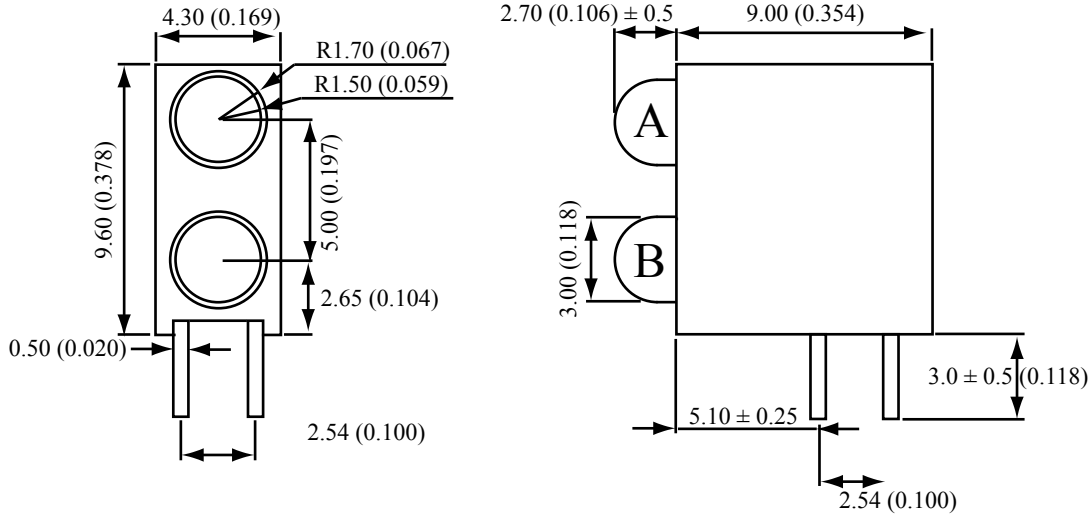


Light Emitting Diode Lamp

★ Package Dimensions



NOTE:

1. All dimensions are in millimeter.
2. Lead spacing is measured where the lead emerge from the package.
3. A= 3-22N-CD43(Top)
B: 3-22N-CD45R(bottom)

★ Selection Guide

Part NO.	Chip		Lens Color	Viewing Angle 2Θ 1/2(deg)
	Material	Emitted Color		
3-22N-CD43/ CD45R/H306	GaP	Green	Color diffused	40
	GaP/ GaAsp	Hi-eff Red		

Light Emitting Diode Lamp

Part No: 3-22N-CD43/CD45R/H306

★ Absolute Maximum Ratings

(Ta=25°C)

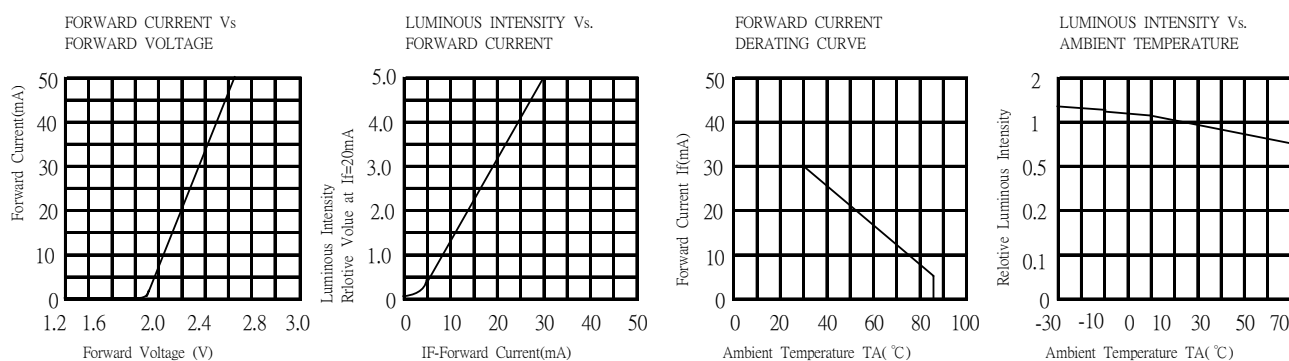
Parameter	Symbol	MAX. Rating	Unit
Power Dissipation	Pd	80	mW
Continuous Forward Current	IF	30	mA
Peak forward current (10 μs Pulse)	IFM	100	mA
Reverse Voltage	VR	5.0	V
Operating Temperature	Topr	-40~+85	°C
Storage Temperature	Tstg	-40~+85	°C
Lead Soldering Temperature (1.6mm From Case Bottom 260°C For 5 SEC)			

★ Electric-Optical Characteristics

Parameter	Symbol	Test Condition	MIN	TYP	MAX	Unit
Forward Voltage	VF	IF=20mA		2.1	2.6	V
Reverse Voltage	VR	IR=10uA			5	V
Luminous Intensity	IV	IF=20mA	20	35		mcd
Peak Emission Wavelength	λ P	IF=20mA		565		nm
Spectrum Width Of Half Value	Δ λ	IF=20mA		30		nm

★ Characteristics Diagrams

Green (GaP)



Light Emitting Diode Lamp

Part No: 3-22N-CD43/CD45R/H306

★ Absolute Maximum Ratings

(Ta=25°C)

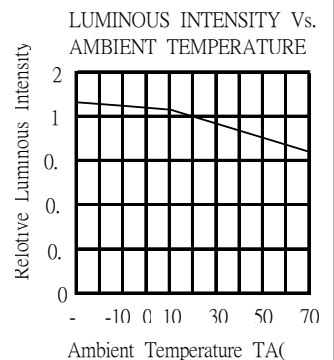
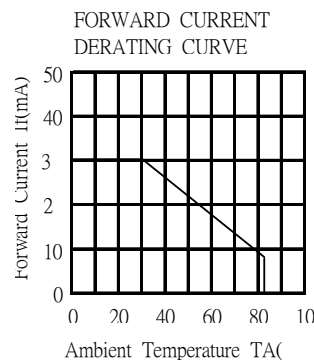
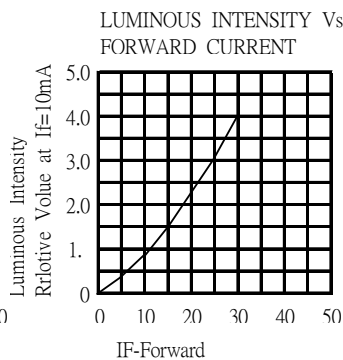
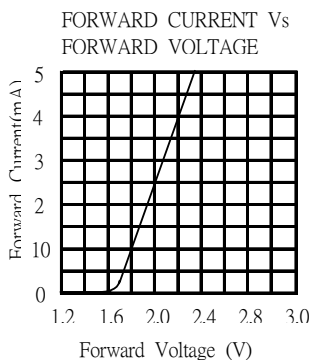
Parameter	Symbol	MAX. Rating	Unit
Power Dissipation	Pd	80	mW
Continuous Forward Current	IF	30	mA
Peak forward current (10 μs Pulse)	IFM	100	mA
Reverse Voltage	VR	5.0	V
Operating Temperature	Topr	-40~+85	°C
Storage Temperature	Tstg	-40~+85	°C
Lead Soldering Temperature (1.6mm From Case Bottom 260°C For 5 SEC)			

★ Electric-Optical Characteristics

Parameter	Symbol	Test Condition	MIN	TYP	MAX	Unit
Forward Voltage	VF	IF=20mA		2.0	2.6	V
Reverse Voltage	VR	IR=10uA			5	V
Luminous Intensity	IV	IF=20mA	20	35		mcd
Peak Emission Wavelength	λ P	IF=20mA		635		nm
Spectrum Width Of Half Value	△ λ	IF=20mA		35		nm

★ Characteristics Diagrams

High Efficiency Red & Orange (GaAsP/GaP)



Light Emitting Diode Lamp

Part No: 3-22N-CD43/CD45R/H306

★Reliability Test

No	Item	Test Condition	Test Hours/Cycles	Samples Tested	Acc./Rej
1	Room Temperature DC Operating Life	Ta=25°C, IF=20mA	1000 Hrs	76	0/1
2	Thermal Shock	-10°C (5min)→ (10sec)→+100°C (5min)	100 Cycles	76	0/1
3	Temperature Cycle	-40°C (30min) →(5min)→+85 °C (30min)	100 Cycles	76	0/1
4	High Temp./ High Humi. Test	85°C /85%RH	1000 Hrs	76	0/1
5	High Temperature Storage	Ta=100°C	1000 Hrs	76	0/1
6	Low Temperature Storage	Ta= - 40°C	1000 Hrs	76	0/1
7	Soldering Heat	260°C±5°C	5 Seconds	76	0/1