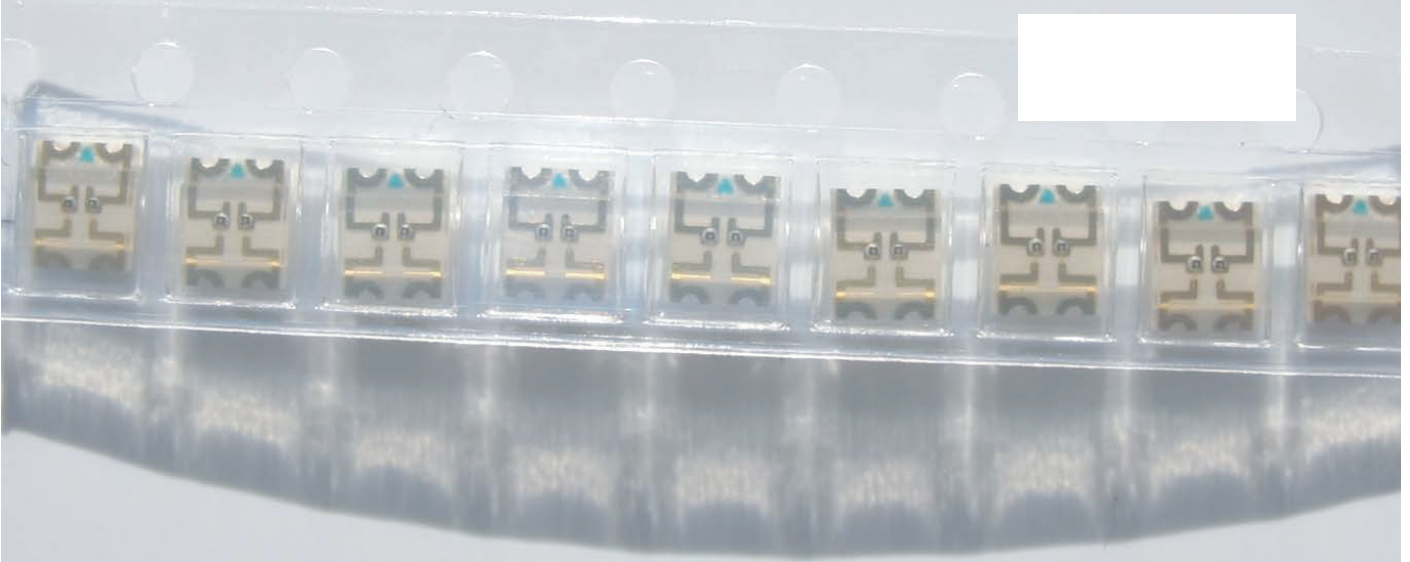




NICOMATIC

CREATIVE
INTERCONNECT
SOLUTIONS

Product
datasheet



LED

MEMBRANE-THIN
0.35 mm HIGH

ADVANTAGES

- 0.35mm high
- Easy to place size versus other packaging
- Reduce spacer thickness and/or eliminate embossing (cost reduction)
- Market standard tape & reel for automated pick & place machines (3 000 LEDs per reel)
- High ESD value for all colors

FUNCTIONALITIES

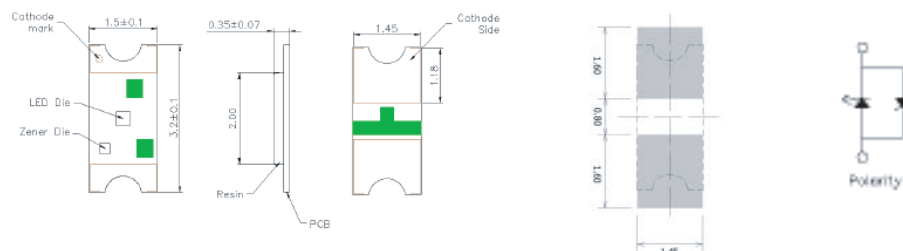
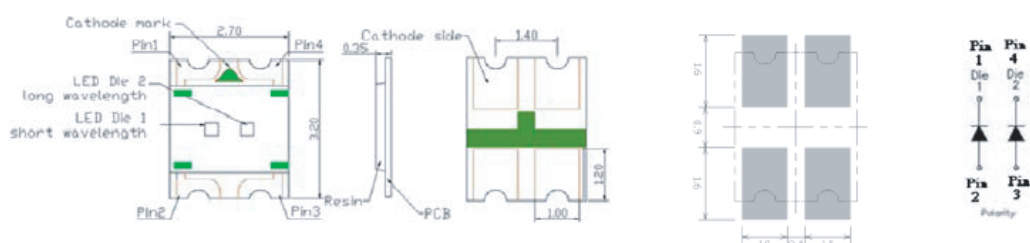
- Specific DESIGN for Printed Conductive Ink

ELECTRO-OPTICAL CHARACTERISTICS (I_F=20mA / T_a=25 °C)

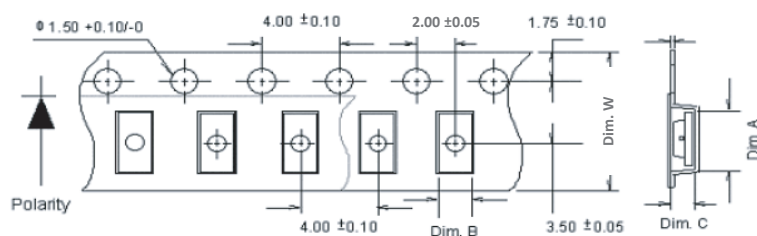
Part Number	Lens Type	Emitting Color	Dominant Wavelength λd (nm)	Luminous Intensity Iv (mcd)		Forward Voltage VF (V)		Reverse Current IR max (μA) @ VR = 5V
				Min.	Typ.	Typ.	Max.	
ZQR35W-035	Water Clear	Red	634	28.5	100	2	2.4	100
ZQO35W-035	Water Clear	Orange	600	60	120	2.05	2.4	100
ZQY35W-035	Water Clear	Yellow	584	60	120	2.05	2.4	100
ZQG35W-035	Water Clear	Green	567	28.5	80	2.1	2.4	100
ZQB35W-035	Water Clear	Blue	465	45	60	3.3	3.8	100
ZQW35D-035	Water Clear	White	-	300	500	3.3	3.7	100
BQRQG35W-035	Water Clear	Red	619	28.5	100	2	2.4	100
		Green	567	28.5	80	2.1	2.4	
BQYQG35W-035	Water Clear	Yellow	584	45	115	2.05	2.4	100
		Green	567	28.5	80	2.1	2.4	
BQRQY35W-035	Water Clear	Red	619	28.5	100	2	2.4	100
		Yellow	584	45	115	2.05	2.4	

PACKAGE DIMENSION & RECOMMENDED SOLDER PATTERN

Mono-color type

Bi-color type

CARRIER TAPE DIMENSION



	Dim. W (mm)	Dim. A (mm)	Dim.B (mm)	Dim.C (mm)
Mono-color tape	8.00 ± 0.20	3.40 ± 0.05	1.80 ± 0.05	0.50 ± 0.05
Bi-color tape	12.00 ± 0.20		2.80 ± 0.05	

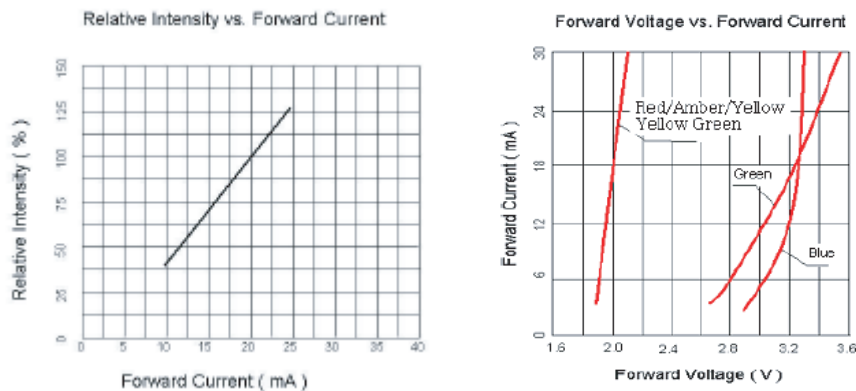
PRODUCT CHARACTERISTICS (ABSOLUTE MAXIMUM RATINGS)

	Red / Orange / Yellow / Green	Blue	White
Reverse voltage V_R	5V		
Forward current I_F	30 mA	20 mA	20 mA
Peak Forward Current I_{FP} (Duty 1/10 @ 1KHz)	100 mA	80 mA	80 mA
Power Dissipation P_d	72 mW	78 mW	78 mW
Electrostatic Discharge (ESD)	2000 V		
Operating temperature T_{opr}	-40°C to +85°C		
Storage temperature T_{stg}	-40°C to +100°C		
Soldering temperature T_{sol}	220°C for 60 sec. 260°C for 10sec.		

Tolerances:

- Luminous Intensity (I_v): $\pm 10\%$
- Dominant Wavelength (λ_d): $\pm 0.5nm$
- Forward Voltage (V_f): $\pm 0.05V$

TYPICAL ELECTRO-OPTICAL CHARACTERISTICS CURVES



PACKAGING INFORMATION

1. Keep moisture proof bag sealed until LEDs are ready to be used.
2. Before opening the package: The LEDs should be kept at 30°C (86°F) or lower & 90% Relative Humidity or less.
3. After opening the package: The LEDs floor life is 1 year under 30°C (86°F) or lower & 60% Relative Humidity or less. Store remaining unused LEDs in moisture proof packages.
4. If the moisture absorbent material (silica gel) has faded away or LEDs have exceeded the storage time, baking treatment should be performed using the following conditions.

OTHER INFORMATION

PRECAUTIONS FOR USE

Electrostatic Discharge (ESD) protection



The symbol to the left denotes that ESD precaution is needed. ESD protection for GaP and AlGaAs based chips is necessary even though they are relatively safe in the presence of low static-electric discharge. Parts built with AlInGaP, GaN, or/and InGaP based chips are **STATIC SENSITIVE devices**. **ESD precaution must be taken during design and assembly**. If manual work or processing is needed, please ensure the device is adequately protected from ESD during the process.

High reliability applications such as military/aerospace, automotive safety/security systems, and medical equipment may require different product. This specification guarantees the quality and performance of the product as an individual component. Do not use this product beyond the specification described in this document.