

LED Arrays with red, green or yellow LED's

- pre-mounted in single or double LED housings
- array blocks can be separated by hand
- exact orientation and correct polarity are guaranteed with the location pin
- high luminosity with low power consumption



Single height LED-arrays



Block consists of: Single height row of 1

Current	red	green	yellow
2 mA	09H0010-62	09H0011-62	09H0012-62
10 mA	09H0010-60	09H0011-60	09H0012-60

packing unit: 80 blocks



Block consists of: Single height row of 2

Current	red	green	yellow
2 mA	09H0020-62	09H0021-62	09H0022-62
10 mA	09H0020-60	09H0021-60	09H0022-60

packing unit: 40 blocks



Block consists of: Single height row of 4

Current	red	green	yellow
2 mA	09H0040-62	09H0041-62	09H0042-62
10 mA	09H0040-60	09H0041-60	09H0042-60

packing unit: 20 blocks



Block consists of: Single height row of 8

Current	red	green	yellow
2 mA	09H0080-62	09H0081-62	09H0082-62
10 mA	09H0080-60	09H0081-60	09H0082-60

packing unit: 10 blocks



Block consists of: Single height row of 16

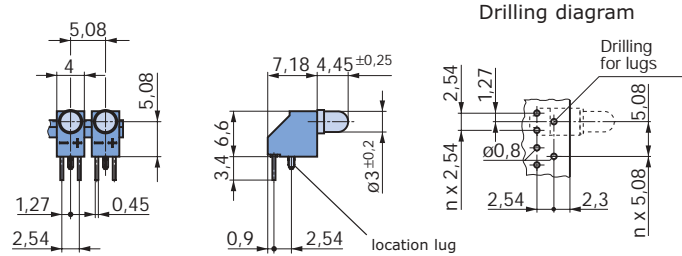
Current	red	green	yellow
2 mA	09H0160-62	09H0161-62	09H0162-62
10 mA	09H0160-60	09H0161-60	09H0162-60

packing unit: 5 blocks

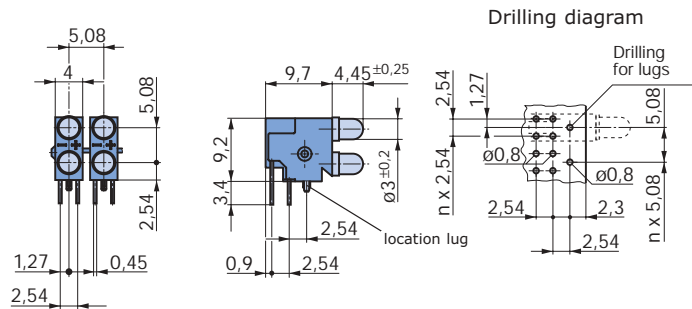
1 mm = 0.04 inch, 1 inch = 25.4 mm

Technical Data and Modified Versions see page 155-157
Items available from stock!

Single height LED-array



Double height LED-array



Double height LED-arrays



Block consists of: Double height row of 1

Current	red/red	green/green	yellow/yellow	red/yellow	red/green	yellow/green
2 mA	09H0010-63	09H0011-63	09H0012-63	09H0015-63	09H0016-63	09H0017-63
10 mA	09H0010-61	09H0011-61	09H0012-61	09H0015-61	09H0016-61	09H0017-61

Color combination: top/bottom

packing unit: 80 blocks



Block consists of: Double height row of 2

Current	red/red	green/green	yellow/yellow	red/yellow	red/green	yellow/green
2 mA	09H0020-63	09H0021-63	09H0022-63	09H0025-63	09H0026-63	09H0027-63
10 mA	09H0020-61	09H0021-61	09H0022-61	09H0025-61	09H0026-61	09H0027-61

Color combination: top/bottom

packing unit: 40 blocks



Block consists of: Double height row of 4

Current	red/red	green/green	yellow/yellow	red/yellow	red/green	yellow/green
2 mA	09H0040-63	09H0041-63	09H0042-63	09H0045-63	09H0046-63	09H0047-63
10 mA	09H0040-61	09H0041-61	09H0042-61	09H0045-61	09H0046-61	09H0047-61

Color combination: top/bottom

packing unit: 20 blocks

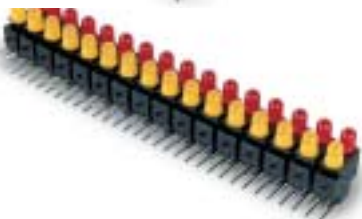


Block consists of: Double height row of 8

Current	red/red	green/green	yellow/yellow	red/yellow	red/green	yellow/green
2 mA	09H0080-63	09H0081-63	09H0082-63	09H0085-63	09H0086-63	09H0087-63
10 mA	09H0080-61	09H0081-61	09H0082-61	09H0085-61	09H0086-61	09H0087-61

Color combination: top/bottom

packing unit: 10 blocks



Block consists of: Double height row of 16

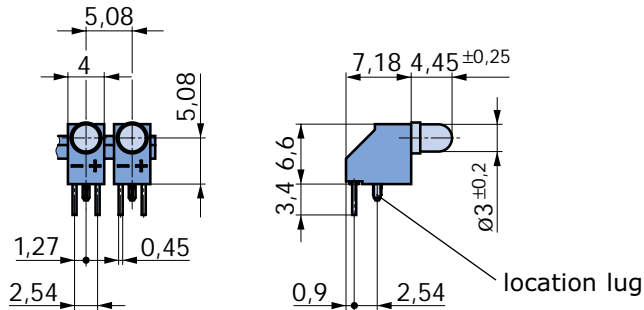
Current	red/red	green/green	yellow/yellow	red/yellow	red/green	yellow/green
2 mA	09H0160-63	09H0161-63	09H0162-63	09H0165-63	09H0166-63	09H0167-63
10 mA	09H0160-61	09H0161-61	09H0162-61	09H0165-61	09H0166-61	09H0167-61

Color combination: top/bottom

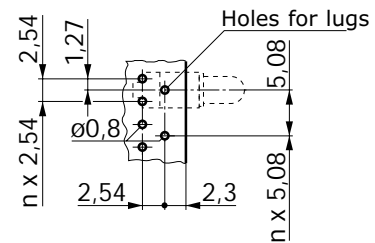
packing unit: 5 blocks

LED Arrays

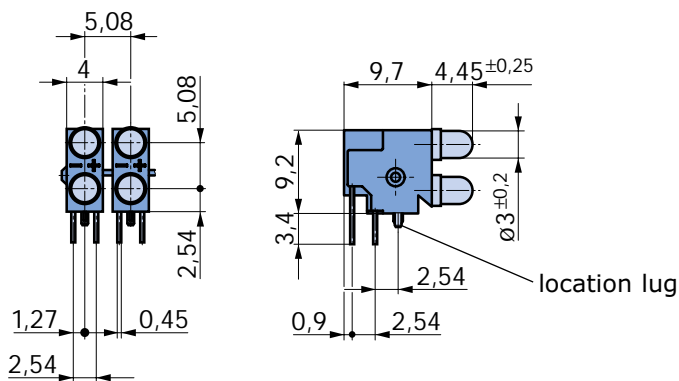
Single height LED-Arrays



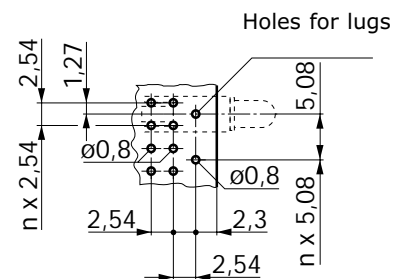
Drilling diagram
View from component side



Double height LED-Arrays



Drilling diagram
View from component side



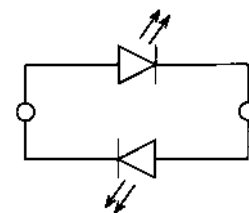
Description

High-quality diode and plastic body, forming a compact unit for easy assembly.

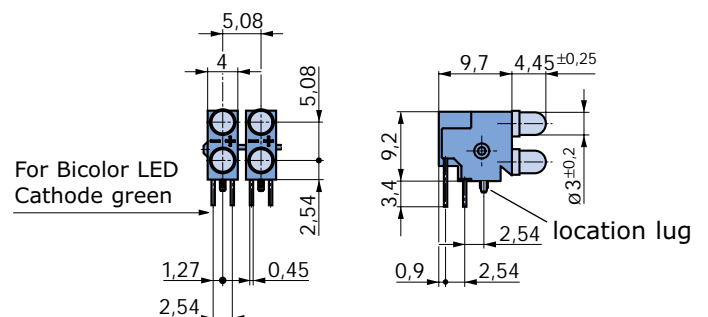
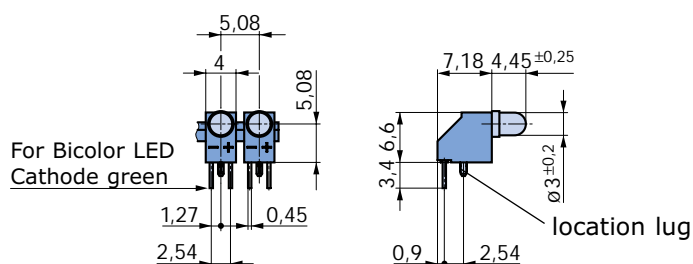
Description Bi-color LED

Bicolor LEDs devices have two semi-conductors connected in antiparallel in the diffused white housing. The LED will light red or green depending on the polarity of the voltage applied.

Contact arrangement



Single or Double height LED Arrays Bi-color



LED Arrays

Features

- Space-saving assembly thanks to small-size components
- Adapted to DIN 41494, steps of 2,54 mm (0,1")
- Assembly is quick and easy

No additional fixings are required
Precise positioning
Soldering and cleaning by machine is possible Available in blocks, ready for assembly with tinned terminals

Technical data

Temperature range
Storage temperature:
- 40 °C to + 85 °C
Operating temperature:
- 40 °C to + 85 °C

Main body material
high-quality temperature-resistant thermoplastic
Main body material

Soldering temperature
≤ 5 s / ≤ 260 °C

LED-Arrays with LED red, green, yellow

Electrical data (LED 2 mA (09H....-..))	red	yellow	green
Light intensity I_V (at $I_F = 2$ mA)	min. 0,8 mcd typ. 2,1 mcd	min. 0,9 mcd typ. 1,6 mcd	min. 1,0 mcd typ. 2,1 mcd
Forward voltage U_F (at $I_F = 2$ mA)	typ. 1,8 V max. 2,0 V	typ. 1,9 V max. 2,5 V	typ. 1,8 V max. 2,2 V
Max. conducted current I_F	7 mA	7 mA	7 mA
Reverse voltage U_R ($I_R = 50$ μ A)	5,0 V	5,0 V	5,0 V
Viewing angle (50% I_V)	50°	50°	50°
Wave length (at $I_F = 2$ mA)	626 nm	585 nm	569 nm
Dissipated power	24 mW	36 mW	24 mW

Electrical data (LED 10 mA (09H....-..))	red	yellow	green
Light intensity I_V (at $I_F = 10$ mA)	min. 3,4 mcd typ. 7 mcd	min. 3,6 mcd typ. 7 mcd	min. 2,6 mcd typ. 7 mcd
Forward voltage U_F (at $I_F = 10$ mA)	typ. 1,9 V max. 2,4 V	typ. 2,0 V max. 2,4 V	typ. 2,1 V max. 2,7 V
Max. conducted current I_F	30 mA	20 mA	30 mA
Reverse voltage U_R ($I_R = 50$ μ A)	5,0 V	5,0 V	5,0 V
Viewing angle (50% I_V)	typ. 60°	typ. 60°	typ. 60°
Wave length (at $I_F = 10$ mA)	626 nm	585 nm	569 nm

LED-Arrays with LED Bi-color

Electrical data	red/green	yellow/green
Light intensity I_V (at $I_F = 20$ mA)	min. 2,5 mcd typ. 10 mcd	min. 2,5 mcd typ. 9 mcd
Forward voltage U_F (at $I_F = 20$ mA)	typ. 2,0 V max. 2,6 V	typ. 2,1 V max. 2,8 V
Max. conducted current I_F	25 mA	20 mA
Reverse voltage U_R ($I_R = 50$ μ A)	5,0 V	5,0 V
Viewing angle (50% I_V)	typ. 100°	typ. 80°
Wave length (at $I_F = 20$ mA)	567/650 nm	569/588 nm

Special options to LED-arrays

To order a special option please use the order form on page 157. Please specify your requirements and fax it to your local contact or to Elma.

Order Form for Special Options for LED Arrays

Copy – Fill in – Fax

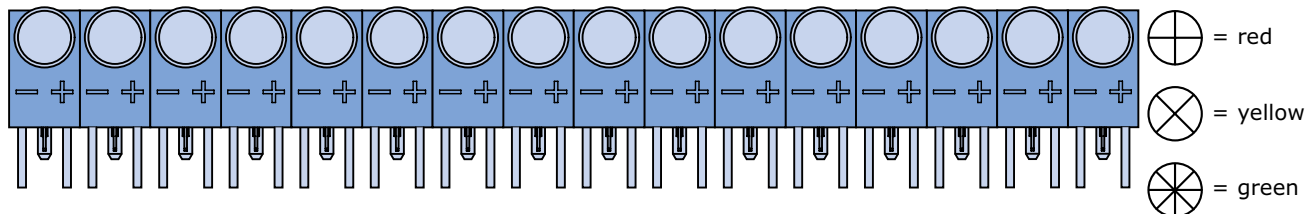
Quote request

Order

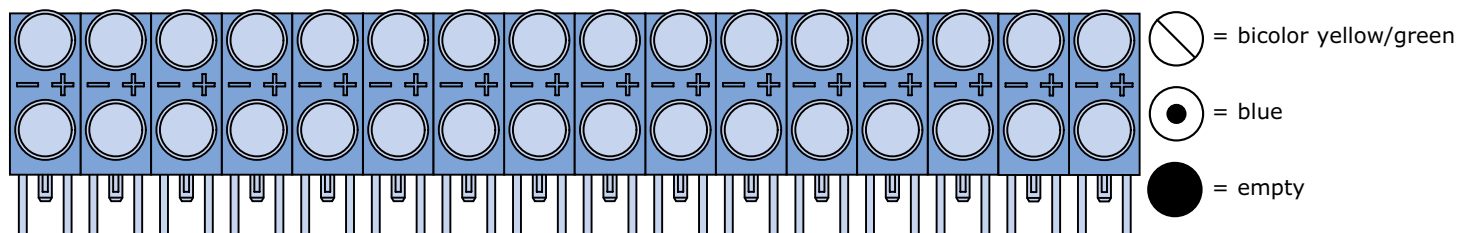
Company		Customer No.	
Address			
		Phone	
Name		Fax	
		e-mail	
Quantity		Requested delivery date	
Similar to order No.		Single-height LED-Arrays 2 mA <input type="checkbox"/> 10 mA <input type="checkbox"/>	
row of 1	<input type="checkbox"/>	Double-height LED-Arrays 2 mA <input type="checkbox"/> 10 mA <input type="checkbox"/>	
row of 2	<input type="checkbox"/>	Single-height LED-Arrays without guide pins <input type="checkbox"/>	
row of 4	<input type="checkbox"/>	Double-height LED-Arrays without guide pins <input type="checkbox"/>	
row of 8	<input type="checkbox"/>		
row of 16	<input type="checkbox"/>		
special row of			

Special loading of Elma-LED-Arrays

Single-height LED-Arrays



Double-height LED-Arrays



Remarks: