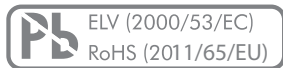


MAIN FEATURES

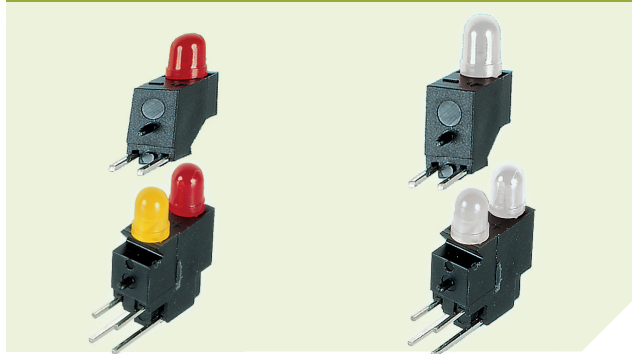
- Pre-mounted single or double LED housings
- Exact orientation and correct polarity are guaranteed with the locator pin
- High luminosity with low power consumption
- Various LED colors
- Space-saving assembly thanks to small-size components
- Adapted to DIN 41494, steps of 2.54 mm (0.1")
- Assembly is quick and easy
- No additional fixings are required
- Soldering and cleaning by machine is possible
- Available in blocks, ready for assembly with tinned terminals



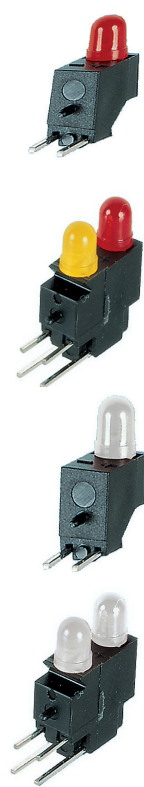
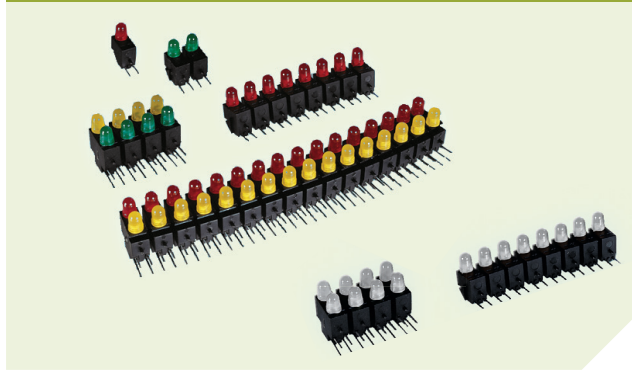
DESCRIPTION

- High quality diode and plastic body, forming a compact unit for easy assembly.
- Bi-color LED devices have two semiconductors connected antiparallel in the diffused white housing. The LED will illuminate red or green depending on the polarity of the voltage applied.

STANDARD LED SOLUTIONS
RED, GREEN, YELLOW, BLU OR BI-COLOR LEDS



CUSTOMIZED SOLUTIONS ON DEMAND



SINGLE HEIGHT LED-ARRAYS (RED, GREEN, YELLOW)

DESCRIPTION	CURRENT	RED	GREEN	YELLOW
Single height of 1 row	2 mA	09H0010-62	09H0011-62	09H0012-62
	10 mA	09H0010-60	09H0011-60	09H0012-60

DOUBLE HEIGHT LED-ARRAYS (RED, GREEN, YELLOW)

DESCRIPTION	CURRENT	RED/ RED	GREEN/ GREEN	YELLOW/ YELLOW	RED/ YELLOW	RED/ GREEN	YELLOW/ GREEN
Double height of 1 row	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

SINGLE HEIGHT LED-ARRAYS (BLUE OR BI-COLOR)

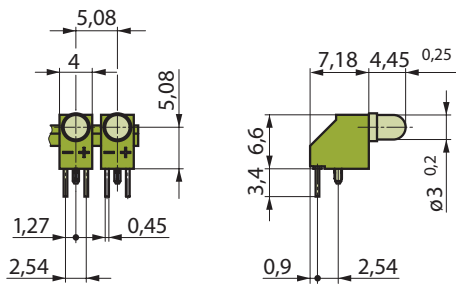
DESCRIPTION	CURRENT	BLUE	BICOLOR RED/GREEN
Single height of 1 row	20 mA	09-0013-64	09-0014-60

DOUBLE HEIGHT LED-ARRAYS (BLUE OR BI-COLOR)

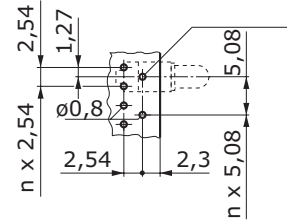
DESCRIPTION	CURRENT	BLUE	BICOLOR RED/GREEN
Double height of 1 row	20 mA	09-0013-65	09-0014-61

SINGLE HEIGHT LED-ARRAYS

Tolerances unless otherwise specified DIN ISO 2768-1 (m)

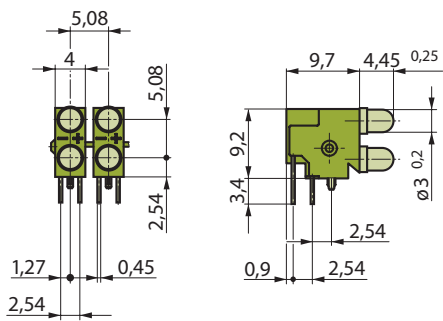


DRILLING DIAGRAM

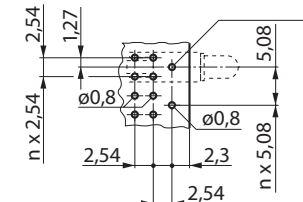


View from mounting side

DOUBLE HEIGHT LED-ARRAYS

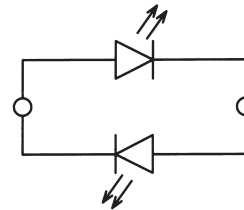


DRILLING DIAGRAM

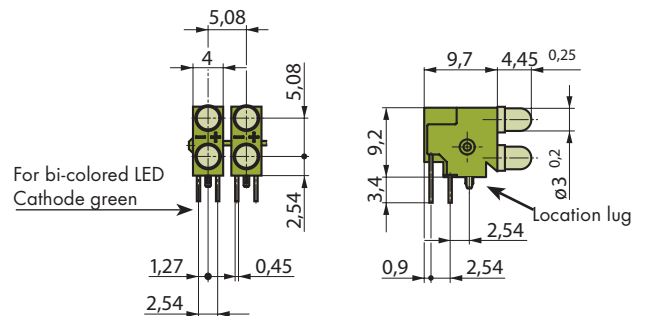
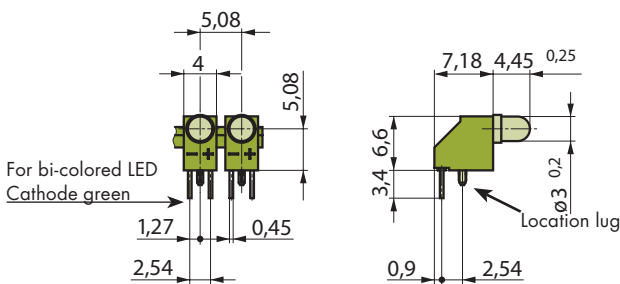


View from mounting side

CONTACT ARRANGEMENT



SINGLE OR DOUBLE HEIGHT BI-COLOR LED-ARRAYS



TECHNICAL DATA

- › Temperature range
 - Storage temperature: - 40°C to +85°C
 - Operating temperature: -40°C to +85°C
- › Main body material: High quality heat resistant thermoplastic
- › Soldering temperature: $\leq 5 \times / \leq 260^\circ\text{C}$

ELECTRICAL DATA LED 2 mA	RED	YELLOW	GREEN
Light intensity IV (at IF =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 UF (at IF = 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 IF	7 mA	7 mA	7 mA
Reverse voltage UR (IR = 50 μA)	5.0 V	5.0 V	5.0 V
Viewing angle (50% IV)	50°	50°	50°
Wave length (at IF = 2 mA)	626 nm	585 nm	569 nm
Dissipated power	24 mW	36 mW	24 mW

ELECTRICAL DATA LED 10 mA	RED	YELLOW	GREEN
Light intensity IV (at IF =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 UF (at IF = 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 IF	30 mA	20 mA	30 mA
Reverse voltage UR (IR = 50 μA)	5.0 V	5.0 V	5.0 V
Viewing angle (50% IV)	typ. 60°	typ. 60°	typ. 60°
Wave length (at IF = 10 mA)	626 nm	585 nm	569 nm

ELECTRICAL DATA LED 20 mA	BLUE	RED/GREEN
Light intensity IV (at IF =20 mA)	min. 30 mcd typ. 45 mcd	min 2.5 mcd typ. 10 mcd
Forward voltage UF (at IF = 20 mA)	typ 4.0 V max. 5.0 V	typ 2.0 V max 2.6 V
Max. conducted current IF	30 mA	25 mA
Reverse voltage UR (IR = 50 μA)	5.0 V	5.0 V
Viewing angle (50% IV)	typ. 40°	typ. 100°
Wave length (at IF = 20 mA)	462 nm	567/650 nm