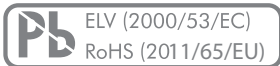


Product description

MAIN FEATURES

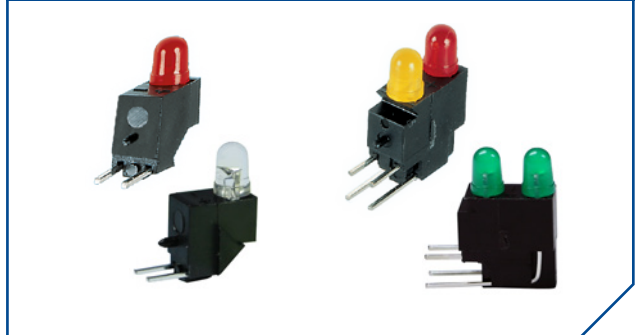
- › Pre-mounted single or double LED housings
- › Exact orientation and correct polarity are guaranteed with the locator pin
- › High luminosity with low power consumption
- › Various LED colors
- › Space-saving assembly thanks to small-size components
- › Adapted to DIN 41494, steps of 2.54 mm (0.1")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



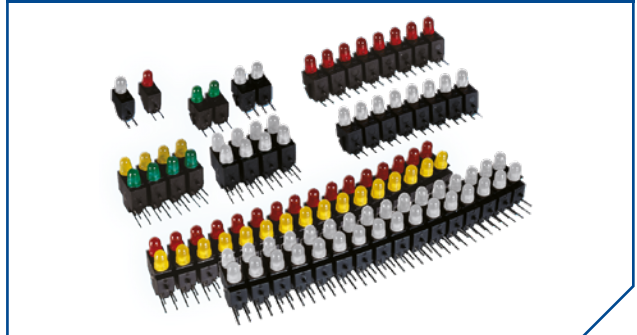
DESCRIPTION

- 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 single or bi-color



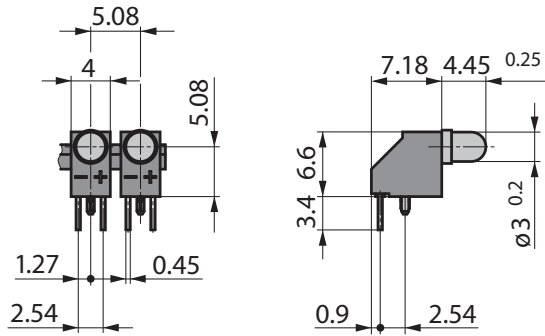
CUSTOMIZED SOLUTIONS on request



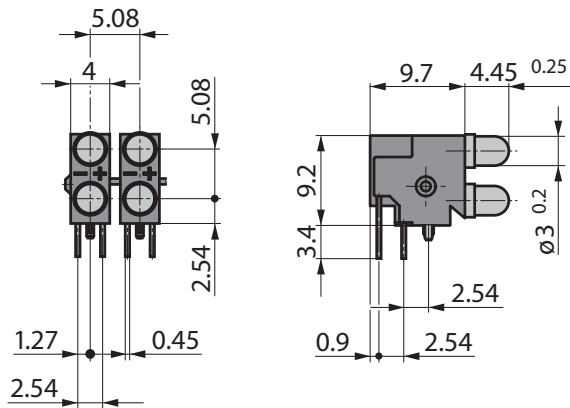
Dimensions

DESIGN

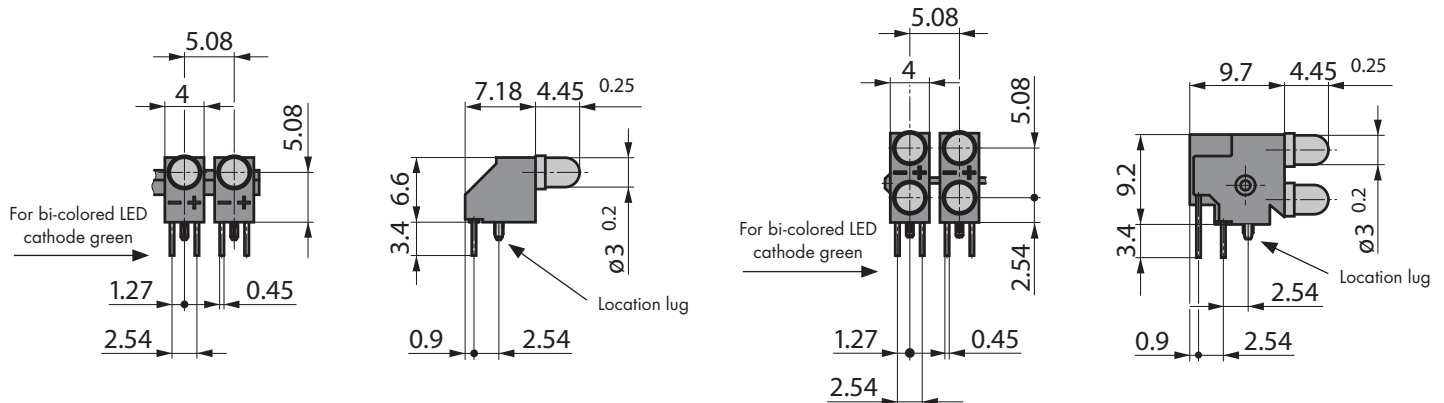
SINGLE LED ARRAYS



DOUBLE LED ARRAYS



SINGLE OR DOUBLE BI-COLOR LED ARRAYS

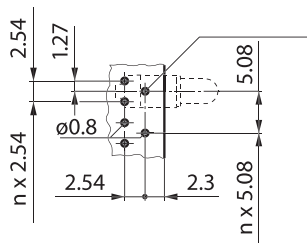


Dimensions in mm
Tolerances according to DIN ISO 2768-1 (m), unless otherwise specified

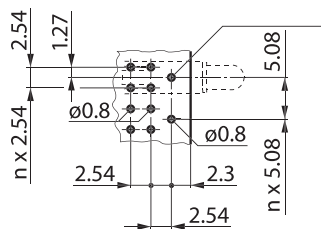
Dimensions

DRILLING DIAGRAM AND FOOTPRINT

SINGLE LED ARRAYS



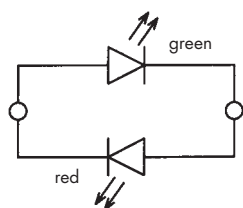
DOUBLE LED ARRAYS



Circuit diagram

CONNECTIONS

BI-COLOR LED



Ordering information

SINGLE LED ARRAYS (RED, GREEN, YELLOW)



DESCRIPTION	CURRENT	RED	GREEN	YELLOW
Single elements	2 mA	09H0010-62	09H0011-62	09H0012-62
	10 mA	09H0010-60	09H0011-60	09H0012-60

DOUBLE LED ARRAYS (RED, GREEN, YELLOW)



DESCRIPTION	CURRENT	RED / RED	GREEN / GREEN	YELLOW / YELLOW	RED / YELLOW	RED / GREEN	YELLOW / GREEN
Double elements	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 LED ARRAYS (RED, GREEN, YELLOW)



DESCRIPTION	CURRENT	BLUE	BI-COLOR RED / GREEN
Single elements	20 mA	09-0013-64	09-0014-60

DOUBLE LED ARRAYS (BLUE OR BI-COLOR)



DESCRIPTION	CURRENT	BLUE	BI-COLOR RED / GREEN
Double elements	20 mA	09-0013-65	09-0014-61

Specifications

ELECTRICAL DATA

ELECTRICAL DATA LED 2 mA	RED	GREEN	YELLOW
Light intensity IV (at IF = 2 mA)	min. 0.8 mcd typ. 2.1 mcd	min. 1.0 mcd typ. 2.1 mcd	min. 0.9 mcd typ. 1.6 mcd
Forward voltage UF (at IF = 2 mA)	typ. 1.8 V max. 2.0 V	typ. 1.8 V max. 2.2 V	typ. 1.9 V max. 2.5 V
Max. conducted current IF	7 mA	7 mA	7 mA
Reverse voltage UR (IR = 50 μ A)	5 V	5 V	5 V
Viewing angle (50 % IV)	50°	50°	50°
Wave length (at IF = 2 mA)	626 nm	569 nm	585 nm
Dissipated power	24 mW	24 mW	36 mW

ELECTRICAL DATA LED 10 mA	RED	GREEN	YELLOW
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. 1.8 V max. 2.2 V	typ. 1.9 V max. 2.5 V
Max. conducted current IF	30 mA	30 mA	30 mA
Reverse voltage UR (IR = 50 μ A)	5 V	5 V	5 V
Viewing angle (50 % IV)	typ. 60°	typ. 60°	typ. 60°
Wave length (at IF = 10 mA)	626 nm	569 nm	585 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 μ A)	5 V	5 V
Viewing angle (50 % IV)	typ. 40°	typ. 100°
Wave length (at IF = 20 mA)	462 nm	567 / 650 nm

Specifications

MATERIALS

Main body: High quality heat resistant thermoplastic

SOLDERING CONDITIONS

Hand soldering: < 260 °C during 5 s

ENVIRONMENTAL DATA

Temperature range:

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

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