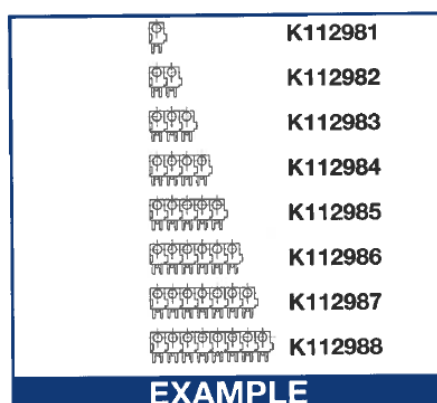
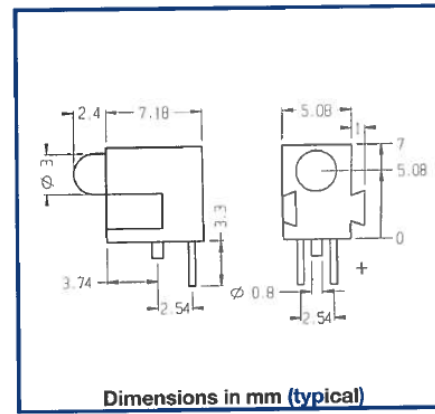




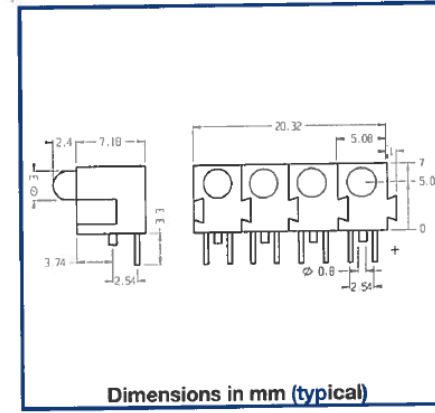
SERIES K112981 Ø 3 mm LED

TYPE (1 LED)	EMITTED COLOUR	LUMINOUS INTENSITY			FULL VIEWING ANGLE	FORWARD VOLTAGE (IF = 20 mA)		OPERATING TEMPERATURE	FORWARD CURRENT
		PEAK	TYP.	IF		TYP.	MAX		
K112981 - R	RED	700	5	10	120	2,0	2,5	- 55	25
K112981 - Y	YELLOW	590	12,5	10	120	2,1	2,5		30
K112981 - G	GREEN	565	12,5	10	120	2,2	2,5		25
K112981 - S	SUPER RED	625	20	10	120	2,0	2,5	to	30
K112981 - B	RED/GREEN	625/565	12,5	20	100	2,0	2,5	+ 100	25
K112981 - I	IPER RED	660	100	20	120	1,85	2,5		30
LOW CURRENT									
K112981 - RL	RED	625	2	2	120	1,8	2,5	- 55	7,5
K112981 - YL	YELLOW	590	2	2	120	1,9	2,7	to	7,5
K112981 - GL	GREEN	565	2	2	120	1,9	2,5	to	7,5
K112981 - IL	IPER RED	660	20	2	120	1,85	2,5	+ 100	7,5
QUALITY TESTED 100%	DIFFUSED	nm	med	mA	DEGREE°	V	V	°C	mA



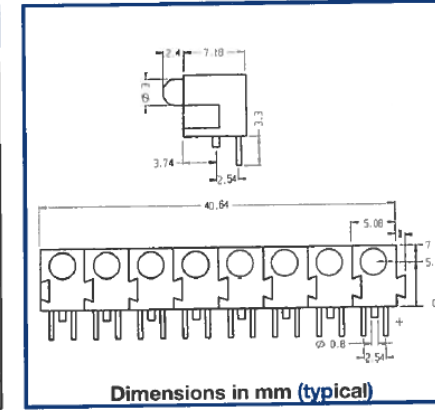
SERIES K112984 Ø 3 mm LED

TYPE (4 LEDs)	EMITTED COLOUR	PEAK	LUMINOUS INTENSITY		FULL VIEWING ANGLE	FORWARD VOLTAGE (IF = 20 mA)		OPERATING TEMPERATURE	FORWARD CURRENT
			TYP.	IF		TYP.	MAX		
K112984 - R	RED	700	5	10	120	2,0	2,5	- 55	25
K112984 - Y	YELLOW	590	12,5	10	120	2,1	2,5		30
K112984 - G	GREEN	565	12,5	10	120	2,2	2,5	to	25
K112984 - S	SUPER RED	625	20	10	120	2,0	2,5	+ 100	30
K112984 - B	RED/GREEN	625/565	12,5	20	100	2,0	2,5		25
K112984 - I	IPER RED	660	100	20	120	1,85	2,5		30
K112984 - M	MULTICOLOURED		INDICATE COLOURS FROM LEFT TO RIGHT (SEE DRAWING)						
LOW CURRENT									
K112984 - RL	RED	625	2	2	120	1,8	2,5	- 55	7,5
K112984 - YL	YELLOW	590	2	2	120	1,9	2,7	to	7,5
K112984 - GL	GREEN	565	2	2	120	1,9	2,5	to	7,5
K112984 - IL	IPER RED	660	20	2	120	1,85	2,5	+ 100	7,5
QUALITY TESTED 100%	DIFFUSED	nm	med	mA	DEGREE°	V	V	°C	mA



SERIES K112988 Ø 3 mm LED

TYPE (8 LEDs)	EMITTED COLOUR	LUMINOUS INTENSITY			FULL VIEWING ANGLE	FORWARD VOLTAGE (IF = 20 mA)		OPERATING TEMPERATURE	FORWARD CURRENT
		PEAK	TYP.	IF		TYP.	MAX		
K112988 - R	RED	700	5	10	120	2,0	2,5	- 55	25
K112988 - Y	YELLOW	590	12,5	10	120	2,1	2,5		30
K112988 - G	GREEN	565	12,5	10	120	2,2	2,5	to	25
K112988 - S	SUPER RED	625	20	10	120	2,0	2,5	to	30
K112988 - B	RED/GREEN	625/565	12,5	20	100	2,0	2,5	+ 100	25
K112988 - I	IPER RED	660	100	20	120	1,85	2,5	to	30
K112988 - M	MULTICOLOURED								
INDICATE COLOURS FROM LEFT TO RIGHT (SEE DRAWING)									
LOW CURRENT									
K112988 - RL	RED	625	2	2	120	1,8	2,5	- 55	7,5
K112988 - YL	YELLOW	590	2	2	120	1,9	2,7	to	7,5
K112988 - GL	GREEN	565	2	2	120	1,9	2,5	to	7,5
K112988 - IL	IPER RED	660	20	2	120	1,85	2,5	+ 100	7,5
QUALITY TESTED 100%	DIFFUSED	nm	mcd	mA	DEGREE°	V	V	°C	mA



MATERIAL SPECIFICATION

- ◆ HOUSING: BLACK, UL94 V-0
- ◆ SOLDERING TEMPERATURE: 260 °C ≤ 6 sec.
- ◆ FLAMABILITY: UL 94 V-0 and acc. VDE 0304 part3
- ◆ CLIMATE: DIN 40040
- ◆ TERMINATIONS: □ 0,5 mm leads
- ◆ Mean Time Between Failure: • standard 100.000 hours • low current 250.000 hours

OPTIONS AVAILABLE

- ◆ 5V & 12 V INTEGRATED RESISTOR
- ◆ BICOLOUR/TRICOLOUR & BIPOLAR
- ◆ BLUE OR WHITE LEDs
- ◆ ULTRABRIGHT - INFRARED & PHOTOTRANSISTORS
- ◆ LED CASE: WATER CLEAR - TRANSPARENT - WHITE
- ◆ FLAT TOP & BLINKING LEDs ◆ SPECIAL LEDs ON REQUEST