

PCB Mounting LEDs

90° mounting PCB or card status indicators fitted with a choice of three sizes of LED element. Vertical configurations include single and multiplex units and horizontally mounting, one way through ten way, side stacking arrays. Options include multi-colour permutations, bi-colours and integral resistor models which are directly compatible with TTL and CMOS drive circuits. Customer benefits include savings on board space and assembly time. Reduced power consumption is a feature of low current PCB LED indicators.

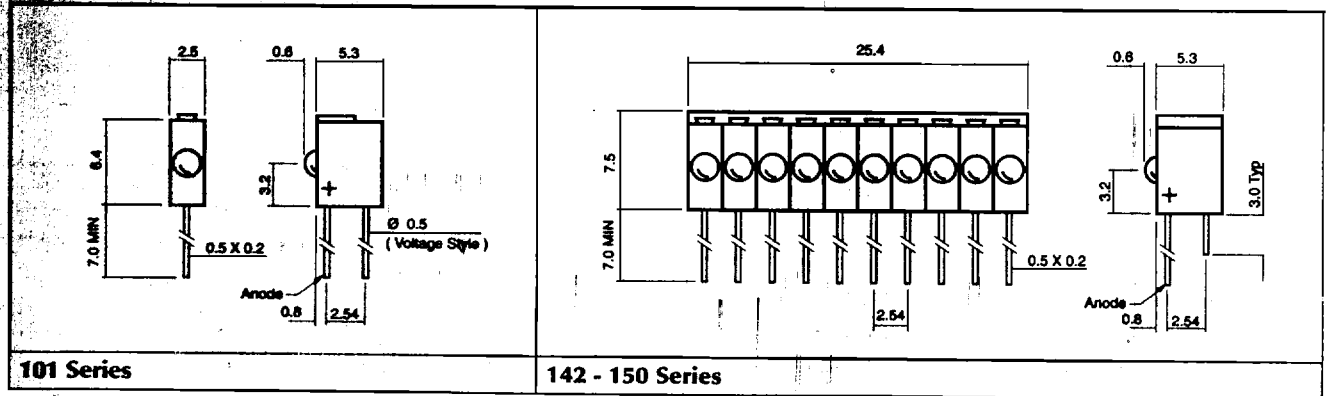
Discrete Hi-Intensity LEDs

Ø 3 & 5mm

Size	Order Code	Colour	Wavelength	Luminous Intensity mcd	Forward Current If	Viewing Angle	Typ. Forward Voltage	Operating Temperature
3mm	100007	Red	660	1200 - 1400	20	50	1.85	-40 to +85
	100038	Yellow	595	100 - 400	20	50	1.8	-30 to +85
	100009	Green	565	100 - 300	20	50	2.2	-40 to +85
	100047	Green	525	2000 - 3400	20	15	3.5 to 4.0	-20 to +80
	100044	Blue	470	600 - 1000	20	15	3.6 to 4.0	-20 to +80
5mm	110069	Red	660	2000 - 3500	20	30	1.85	-40 to +85
	110070	Yellow	595	700 - 2700	20	30	1.8	-30 to +85
	110025	Green	565	100 - 300	20	30	2.2	-40 to +85
	110104	Green	525	3000 - 5000	20	15	3.5 to 4.0	-20 to +80
	110106	Blue	470	900 - 1500	20	15	3.6 to 4.0	-20 to +80
			nm	mcd	mA	deg	Vdc	°C

PCB Mounting LEDs

Ø 2mm



101 Series

142 - 150 Series

Drawing scale 2:1
Dimensions in mm (Typical)
MTBF 100,000 Hours

Operating / Storage Temperature Range -40 to +80 °C

Order Code: 144 - 214 - 02

Multiplex Options

- 101 - 1 WAY
- 142 - 2 WAY
- 143 - 3 WAY
- 144 - 4 WAY
- 145 - 5 WAY
- 146 - 6 WAY
- 147 - 7 WAY
- 148 - 8 WAY
- 149 - 9 WAY
- 150 - 10 WAY

LED Options

Code - LED Colour / Intensity at 10mA

- 205 - RED 635 nm 3 mcd
- 211 - YELLOW 585 nm 3 mcd
- 214 - GREEN 563 nm 3 mcd

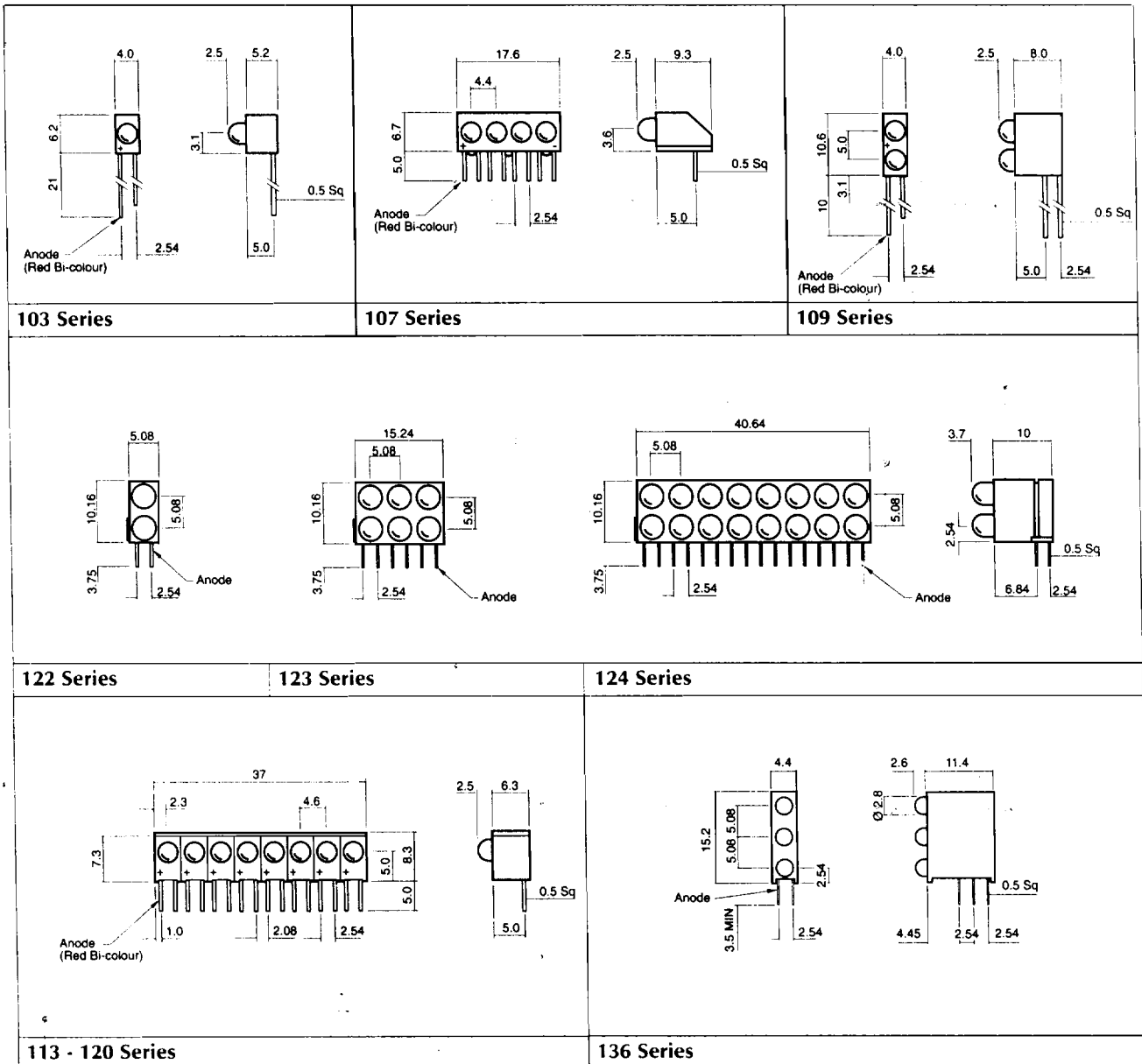
Voltage Options

Code - Voltage / Current

- 01 - 1.9 Vdc @ 2 mA
- 02 - 2.1 Vdc @ 10 mA
- 20 - 5 Vdc @ 7 mA

PCB Mounting LEDs

Ø 3mm



Drawing scale 1:1
Dimensions in mm (Typical)
MTBF 100,000 Hours

Operating / Storage Temperature Range -40 to +80 °C

Order Code: **124 - 305 - 04**

Series Options:

103	118 (6 Way)
107	119 (7 Way)
109	120 (8 Way)
113 (1 Way)	122
114 (2 Way)	123
115 (3 Way)	124
116 (4 Way)	136
117 (5 Way)	

LED Options:

Code - LED Colour / Intensity at 20 mA

305 - RED 635 nm	33 mcd
311 - YELLOW 585 nm	33 mcd
314 - GREEN 563 nm	47 mcd
330 - RED/GREEN Bi colour	12 mcd
635/565 nm	

330 LED not available on 122, 123 & 124 Series

Voltage Options:

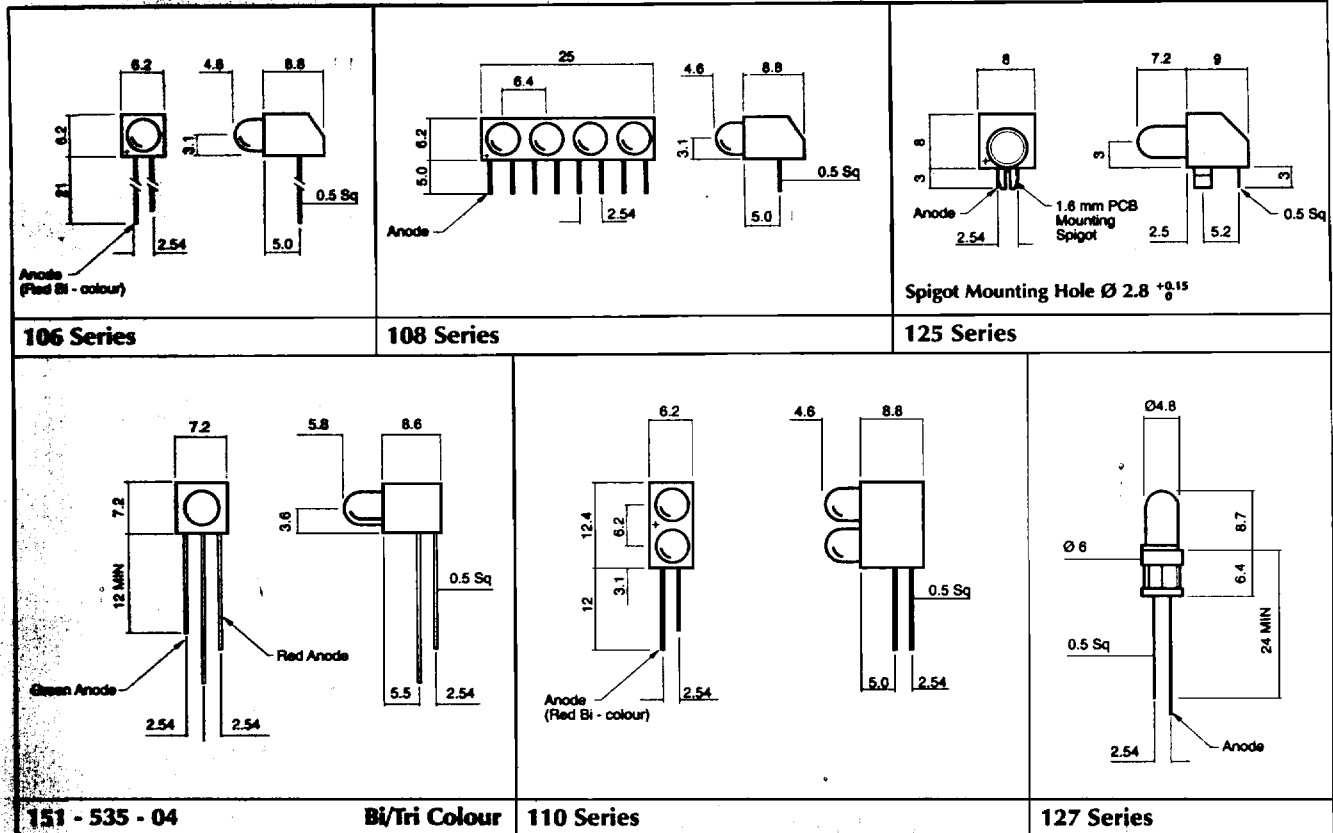
Code - Voltage / Current

01 - 1.9 Vdc @ 2 mA
04 - 2.2 Vdc @ 20 mA

5 Volt options available

PCB Mounting LEDs

Ø 5mm



Drawing scale 1:1
 Dimensions in mm (Typical)
 AATBF 100,000 Hours

Operating / Storage Temperature Range -40 to +80 °C

Order Code: **124 - 305 - 04**

Code	Colour	Intensity at 20 mA
305	RED	5.00 mcd
511	YELLOW	5.00 mcd
514	GREEN	5.00 mcd
535	RED / GREEN Bi-colour	5.00 mcd
538	5.15 / 5.65 mcd	
535 LED only available in 1000 quantities		

Code	Voltage	Current
01	1.9 Vdc	20 mA
04	2.2 Vdc	20 mA

5 & 12 Volt options available

Code	LED Colour / Intensity at 20 mA
305	RED 5.00 mcd
511	YELLOW 5.00 mcd
514	GREEN 5.00 mcd
535	RED / GREEN Bi-colour 5.00 mcd
538	5.15 / 5.65 mcd
535 LED only available in 1000 quantities	

PCB Mounting LEDs - Housing Material

Technical Information

All series except 122, 123 and 124

Nylon 6. This material exhibits versatile electrical and mechanical properties making it well suited for a wide range of environments. UL94 V-O flame retardancy.

122, 123 and 124 Series

Polycarbonate. This material offers UL94 V-O flame retardancy and a high impact strength.

Lead Cropping

Should lead cropping be required Marl offer two standard lengths, by adding one of the following codes to the end of the part number: **24 = 3mm; 26 = 5mm**
 Example: 103-305-01-24 (here the last two digits indicate 3mm lead cropping)
 Other non-standard lead lengths are available on request.