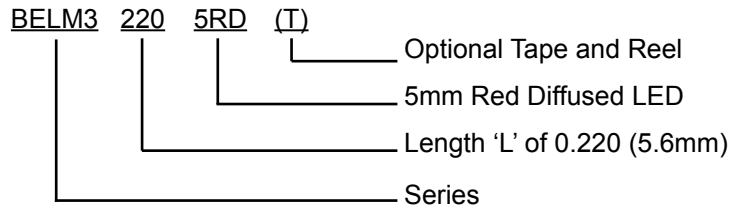


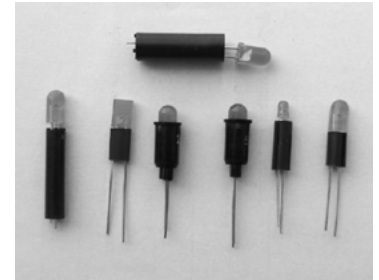
Vertical LED Assemblies Simplify assembly & inventory. High reliability. Consistent positioning & performance. Wide range of colours, Bi Colour and Tri-Colour , Low current and 5 Volt LED's available

- 3mm, 5mm & Rectangular LED's
- Lengths from 1.0 to 21.0mm
- Tape & Reel optional 2.0 to 13mm
- Light shield types available
- High temperature versions optional

Part Number Example



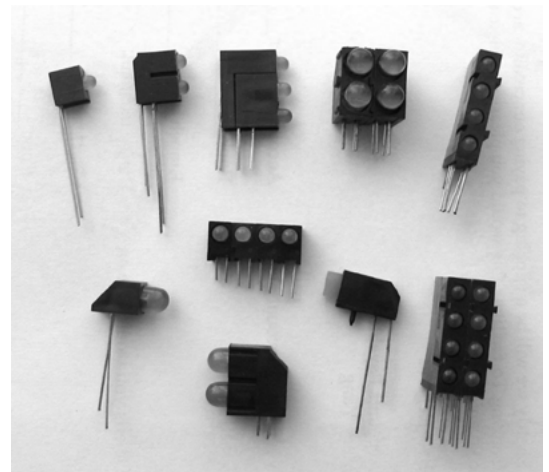
Series	Description
BELM1	5mm Narrow Profile
BELM2	3mm Standard Profile
BELM3	5mm Standard Profile
BELM5	3mm Narrow Profile
BSLM	5mm With Light Shield
BRL1-4	2x4 Rectangular
BRL1-5	2x5 Rectangular



90° LED Assemblies Simplify assembly & inventory. High reliability. Consistent positioning & performance. Wide range of colours, Bi Colour and Tri-Colour , Low current and 5 Volt LED's available

- Space saving designs
- Accurate & consistent LED positioning
- Subminiature options
- Rectangular vertical & horizontal assemblies
- Industry standard footprints

Series	Description
2mm	Single, Tri, Quad Level Arrays
3mm	Single, Quad & Interlocking Arrays, Single, Bi, Tri & Quad Levels, Variable Centrelines on Single & Bi-Level, Compact 16.5mm High Quad Option, Single SMD Type suitable for IR Reflow
5mm	Single, Quad & Interlocking Arrays, Single & Bi-Level, Bi & Tri-Colour Single & Bi-Level Arrays, Single SMD Type suitable for IR Reflow



Typical LED Specifications for the above assemblies

Standard Types ‡

Colour	Peak (nm)	Typ. VF	Typ. IFmA	3mm* Typ.mcd	5mm Typ.mcd
Red	660	1.7	20	8.0	15.0
Green	565	2.2	20	15.0	15.0
Yellow	585	2.1	20	18.0	18.0
Super Red	660	2.2	20	60.0	50.0
HE Red	635	2.0	20	40.0	30.0
Blue	430	5.0	20	15.0	15.0

Bi-Colour & Tri-Colour

Colour	Peak (nm)	Typ. VF	Typ. IFmA	3mm* Typ.mcd	5mm Typ.mcd
Red	635	2.0	20	25.0	35.0
Green	565	2.2	20	30.0	45.0
Yellow	585	2.1	20	20.0	30.0
Green	565	2.2	20	30.0	45.0

* Ultra bright options up to 1000 mcd
 ‡ Low Current and 5 volt types available.

Call us for a full BivarOpto Catalogue or visit their internet site; www.bivar.com for more detail. All components are from stock or on short delivery with quantities of 100 up.