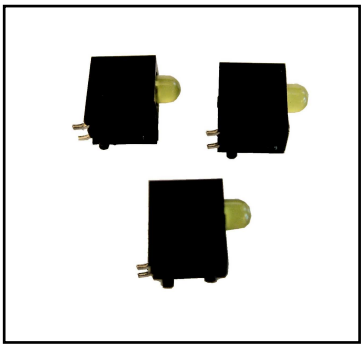
PCB MOUNTING LEDs - Ø 3mm Surface Mount



153 SERIES

PACK QUANTITY = 250 PIECES

FEATURES

- **Compatible with surface-mount soldering techniques**
- **Housing conforms to UL94 V-0 flammability ratings**
- **Easy fitting and polarity identification**
- **Products illustrated 153-311-04**
- **Typically available ex stock**

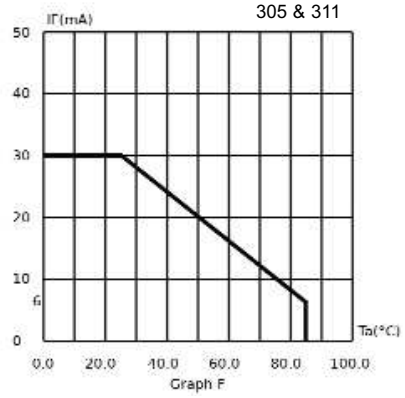
SPECIFICATIONS

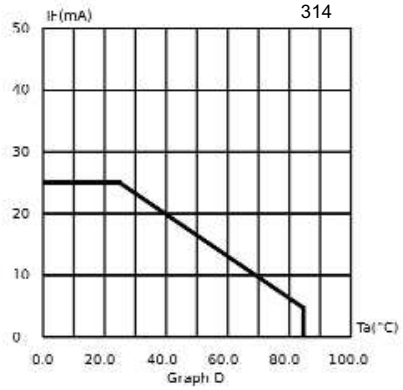
Ordering Information & Typical Technical Characteristics (Ta = 25°C)

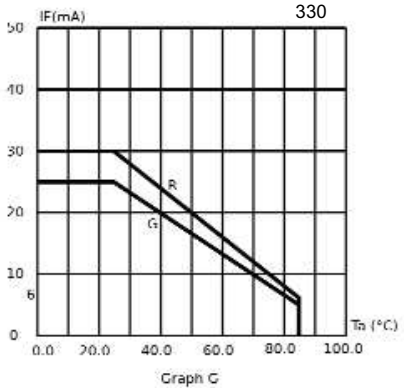
Mean Time Between Failure = 100,000 Hours. Luminous intensity figures refer to the unmodified discrete LED.

PART NUMBER	COLOUR	LENS	VOLTAGE DC Vopr	CURRENT DC Iopr	LUMINOUS INTENSITY Iv@20mA	WAVE LENGTH λp	OPERATING TEMP Topr	STORAGE TEMP Tstg	RoHS 2002/95/EC
STANDARD INTENSITY									
153-305-04	Red	Colour Diffused	2.0*	20	40	627	-40 ~ +85^	-40 ~ +85	Yes
153-311-04	Yellow	Colour Diffused	2.1*	20	30	590	-40 ~ +85^	-40 ~ +85	Yes
153-314-04	Green	Colour Diffused	2.2*	20	40	565	-40 ~ +85^	-40 ~ +85	Yes
153-330-04	Red/Green	White Diffused	2.0/2.2*	20	20/16	627/565	-40 ~ +85^	-40 ~ +85	Yes
UNITS			**Vdc**	**mA**	**mcd**	**nm**	**^{0}C**	**^{0}C**	

* = Voltage DC for 20mA product is Vf@20mA, not Vopr







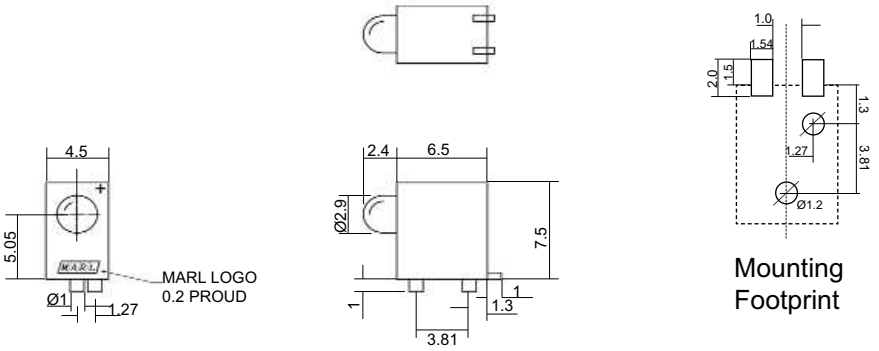
^ = Products must be derated according to the derating information. Each derating graph refers to specific LEDs.

How to Order:

website: www.marl.co.uk • email: sales@marl.co.uk •

• Telephone +44 (0)1229 582430 • Fax: +44 (0)1229 585155

153 Series



Dimensions in mm (Typical)
Not to scale

Housing Material

Polycarbonate

This material offers UL94 V-0 flame retardancy* and a high impact strength. This material has a melt point of 290-340°C and is suitable for use in the majority of automatic soldering processes.

*Material test thickness 1.6mm

LEDs

LED Polarity

Anode identification is shown in the dimensional diagram. For the 2 pin Bi-colour units the standard colour configuration is red anode to the '+' sign.

Bi-colour

2 Pin Operation

To achieve the second colour for a 2 pin Bi-colour unit the supply must be reversed, standard colour configuration for these units is red anode to the '+' sign.

Electro-static Discharge (ESD)

Build up of electrostatic discharge occurs in many situations involving people moving and handling products. The range of possible situations is very diverse but voltage levels as high as several thousand volts can and do arise in many individual situations. When an operator charged up to these levels handles a 'static sensitive device', there is a very probable likelihood that the device will be irreversibly damaged. It is essential that precautions are taken at all stages during manufacture and assembly of these products. Although LEDs were never considered to be static sensitive devices, changes in manufacturing technology and materials used to produce higher intensity products over a large range of the wavelength spectrum have changed this. Marl has an approved system of ESD control from goods in, through production and into final packing and despatch. We recommend all users of LED based products follow the guidelines of BS 100015.

Note: All luminous intensity figures refer to the unmodified discrete LED.

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