



# High Reliability Ultrabright ChipLEDs

## SMALL BUT EXTRAORDINARILY EFFICIENT



### FEATURES: 0603 L/F-BASED:

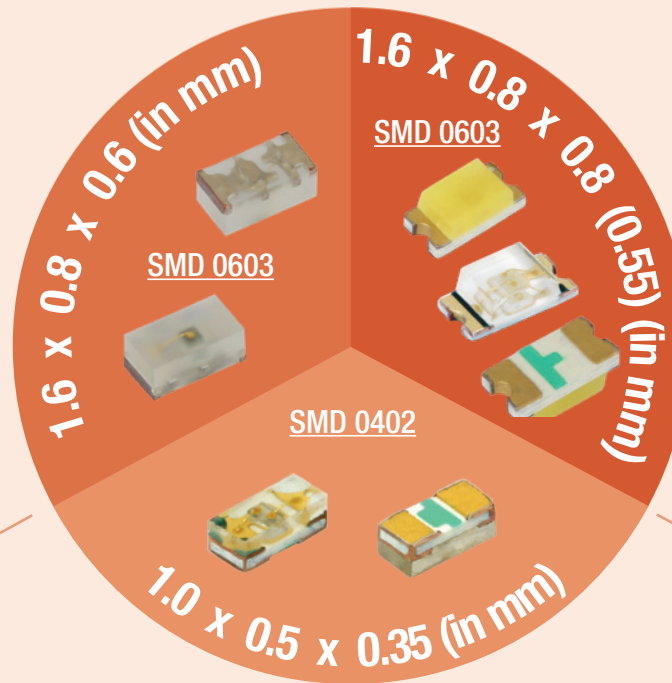
- High reliability, **lead frame** based
- Temperature range **from -40 °C to +100 °C**
- Preconditioning according to **JEDEC® level 2**
- AllInGaP technology** with exceptional brightness
- Viewing angle: **extremely wide 160°**
- Compatible to **IR reflow** soldering

### APPLICATIONS

- Displays for industrial control systems
- Switch illumination
- Indicators



**TLM\*110x** ... standard  
**TLM\*100x** ... low current



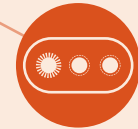
### FEATURES: 0603 PCB-BASED:

- High reliability, **PCB-based**
- AllInGaP and InGaN technology** with exceptional brightness
- Viewing angle: **extremely wide 130°**
- Preconditioning according to **JEDEC® level 3**
- Compatible to **IR reflow** soldering

### APPLICATIONS

- Wearables
- Backlighting
- Indicators

**VLM\*13.. / VLMTG14..**



### FEATURES: 0402 PCB-BASED

- High reliability, **PCB-based**
- AllInGaP and InGaN technology**
- Viewing angle: **extremely wide 130°**
- Grouping parameter: luminous intensity, wavelength (except super red and soft orange),  $V_f$
- Compatible to **IR reflow soldering**
- Preconditioning according to **JEDEC® level 2a**

**VLM\*150..**



### APPLICATIONS

- Indicators
- Switch illumination
- Miniaturized color effects

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