

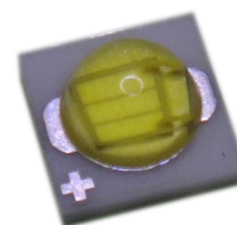


## Competitively priced LED's for system integration

Marubeni distributes various LEDs by epitex, including Molded, Surface Mount, and High Power Illuminators, for integration into ANPR, Security Cameras, Sorting, Horticulture, Iris/Facial Recognition, Counterfeit Detectors, Medical/Aesthetic, and many other applications.

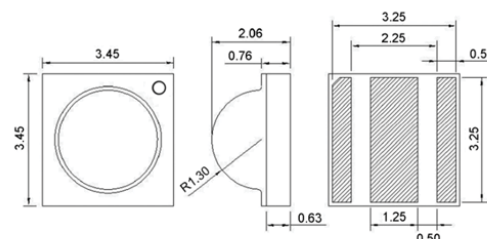
## NEW "POWER WHITE" UP TO 260 LUMEN SMD LED

November 2014, Santa Clara, CA...Marubeni-OPTO™ (Marubeni America Corp, Optoelectronic Products), your leader in LED and Sensor technologies, now introduces a new series of high-power leadless surface-mount White LEDs, packaged in a micro-miniature 3.5 x 3.5 mm device outline with a height of only 2.6 mm. The new lead (Pb) free RoHS compliant chip-scale EDC Series package style employs highly diffusely reflective rugged ceramics with a domed silicone lens for maximum durability and lifetime. The high-brightness LED technology utilizes the latest in AlInGaN MOCVD (metal-organic chemical vapor deposition) epitaxial wafer technology that is used to yield a 1000 x 1000 micron compound semiconductor die with integrated photo-conversion phosphor over-layer to produce a pure white emission color approximating equal-energy white (CIE 1931  $x = 0.32$ ;  $y = 0.33$ ). Capable of being powered by up to 700mA forward current, the device produces a luminous flux of 110 lumens at 1 Watt steady-state drive (350 mA) and 260 lumens in pulsed operation. The wide  $\pm 57^\circ$  viewing angle makes this device ideal for solid-state new design or redesign general lighting product applications.



### ◆Electro-Optical Characteristics [Ta=25°Ctyp]

| Item               | Symbol         | Condition  | Minimum | Typical  | Maximum | Unit |
|--------------------|----------------|------------|---------|----------|---------|------|
| Forward Voltage    | VF             | IF=350mA   |         | 3.1      | 3.5     | V    |
|                    | VFP            | IFP=1000mA |         | 3.6      |         |      |
| Radiated Power     | PO             | IF=350mA   |         | 360      |         | mW   |
|                    |                | IFP=1000mA |         | 850      |         |      |
| Luminous Flux      |                | IF=350mA   |         | 110      |         | lm   |
|                    |                | IFP=1000mA |         | 260      |         |      |
| Color Temperature  | Tc             | IF=350mA   |         | 6000     |         | K    |
| Chromaticity       | x              | IF=350mA   |         | 0.32     |         |      |
|                    | y              |            |         | 0.33     |         |      |
| Viewing Half Angle | $\theta_{1/2}$ | IF=350mA   |         | $\pm 57$ |         | deg  |
| Rise Time          | tr             | IF=350mA   |         | 45       |         | ns   |
| Fall Time          | tf             | IF=350mA   |         | 80       |         | ns   |



The small size and product characteristics are also ideal for:

- ▶ Signaling for rescue
- ▶ Smart phone camera flash
- ▶ Directional wearable lighting
- ▶ Various types of handheld flashlights via single devices or arrayed device formats
- ▶ The device easily optically couples with solid-body waveguides for highly-uniform BLU (backlight unit) applications that require high luminance and small bezel dimensions.

For inquiries regarding this production series of devices, contact Marubeni-OPTO™ now to learn further details.