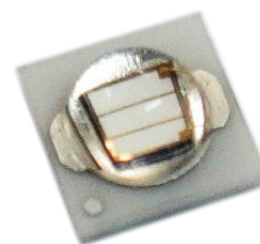


Competitively priced LED's for system integration

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 "Near-UV 405 nm (λ P) Power LED" SMD with Up to 1200 mW (PO) Violet Output

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 UV and Near-UV 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 and metallization 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 producing 405 \pm 5nm near-UV violet hue. Capable of being powered at 500 mA steady-state forward current, the device produces a radiated power of 900 mW and 1200 mW in pulsed 700 mA operation. The wide \pm 68° viewing angle makes this device ideal for solid-state remote phosphor lighting applications. These high quantum efficiency devices can be used for numerous purposes:

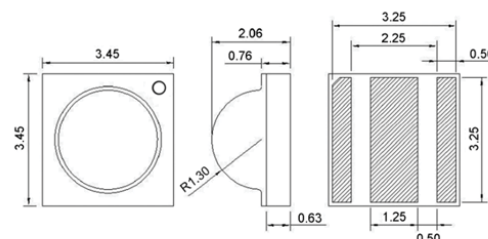


♦ Electro-Optical Characteristics [Ta=25°Ctyp]

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	VF	IF=500mA		3.6	4.2	V
	VFP	IFP=700mA		3.8		
Radiated Power	PO	IF=500mA		900		mW
		IFP=700mA		1200		
Peak Wavelength	λ P	IF=500mA	400	405	410	nm
Half Width	$\Delta\lambda$	IF=500mA		12		nm
Viewing Half Angle	$\theta_{1/2}$	IF=100mA		\pm 68		deg
Rise Time	tr	IF=500mA		55		ns
Fall Time	tf	IF=500mA		75		ns

‡Radiated Power is measured by S3584-08.

‡Radiant Intensity is measured by CIE127-2700 Condition B.



Application

- ▶ Medical Diagnostic, Research and Treatment (bactericidal effects on Pseudomonas aeruginosa, Staphylococcus aureus and Propionibacterium acnes; treatment of dermatitis; flow cytometry analysis; DNA elution analysis; plate-based immunoassays quantifying substances such as peptides, proteins, antibodies and hormones, photo-dynamic therapy, etc)
- ▶ Fluorescence Imaging & Recovery
- ▶ Photo-Initiation Curing (inks, adhesives, paints, varnishes, coatings)
- ▶ 3D Printing
- ▶ Microscopy
- ▶ Machine Vision
- ▶ Forensics

The high optical power of this device in single or multiple-up arrayed formats is an effective replacement for lasers and lamps in many new or retrofit design projects. Its small size can be used effectively for advanced ergonomic parameters, for fiber-coupling designs and flood lamps or strips.

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