ROITHNER LaserTechnik GmbH

WIEDNER HAUPTSTRASSE 76   1040 VIENNA   AUSTRIA
TEL. +43 1 586 52 43 -0, FAX. -44, OFFICE@ROITHNER-LASER.COM

C355-2SR1

TECHNICAL DATA

UV LED chip die, 355nm

Drawing

Thickness: 120 µm ± 10 µm

All dimensions in µm
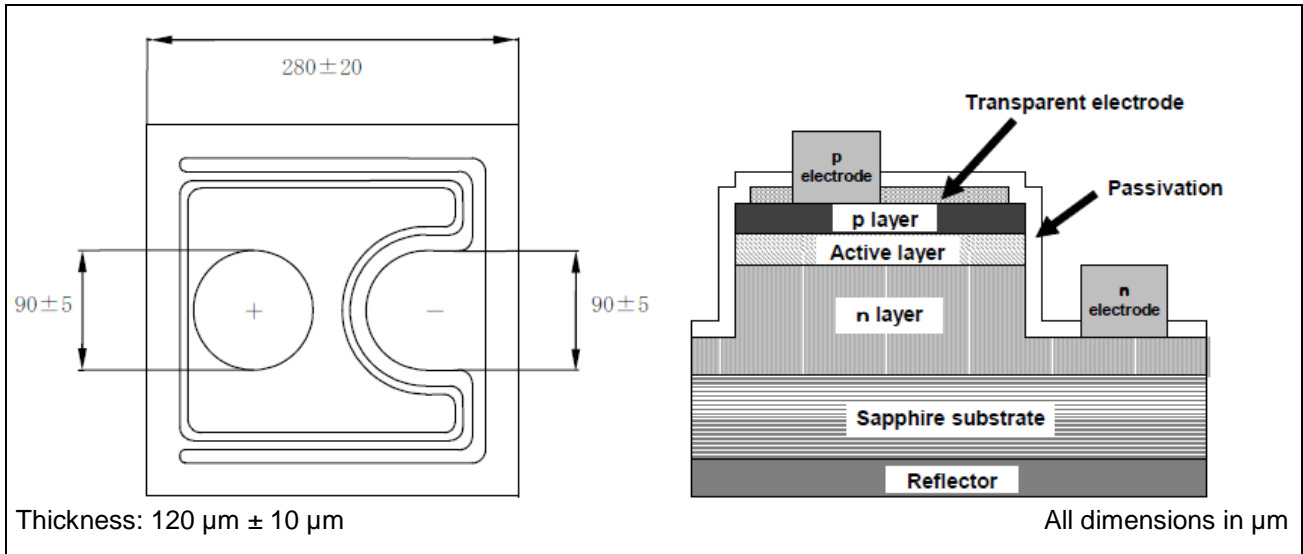
Storage Conditions

Item	Value
Storage time	3 Months
Storage Temperature	5 … +35 °C
Storage Humidity	45 …85 %

Specifications (If=20mA, T_a=25°C)

Item	Symbol	Min.	Typ.	Max.	Unit
Electrical Specification					
Forward Voltage [1]	U_F	3.2	3.6	4.2	V
Reverse Current	I_R			10.0	µA
Optical Specification					
Optical Power	P_O	0.5	-	1.0	mW
Peak Wavelength [2]	λ_P	353	-	360	nm
Spectral Half Width (FWHM)	$\Delta\lambda$		15		nm

* measurement tolerance is ± 0.2 V, ± 2 nm

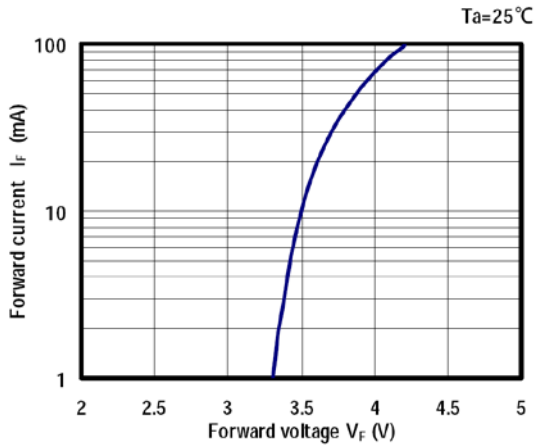### Device Materials

Item	Material
Wafer material	GaN based on Sapphire Substrate
Electrodes	n-contact Au p-contact Au

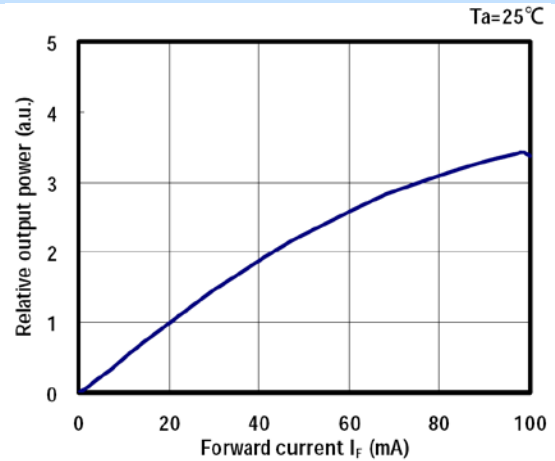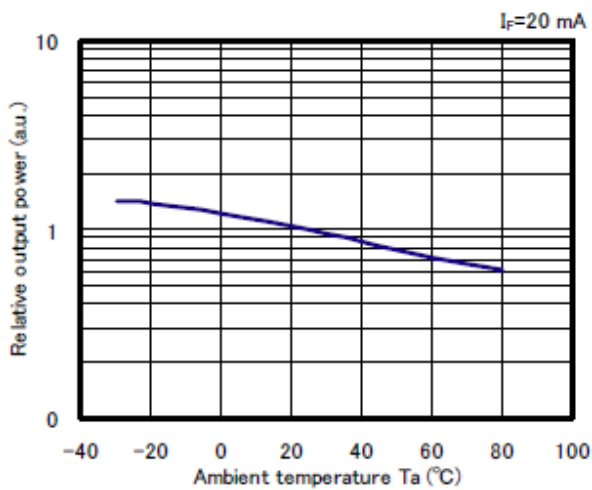**XSL-355-5E is RoHS compliant**

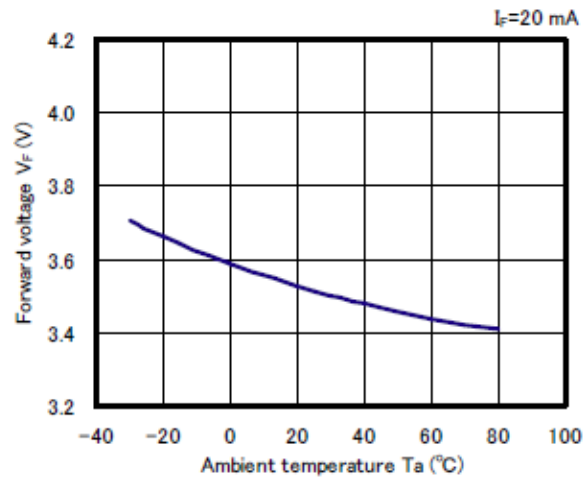## Typical Performance Curves

forward voltage vs. forward current:

Ta=25℃

forward voltage vs. relative output power:

Ta=25℃

ambient temperature vs. relative output power:

I_F=20 mA

ambient temperature vs. forward voltage:

I_F=20 mA

ambient temp. vs. maximum forward current:
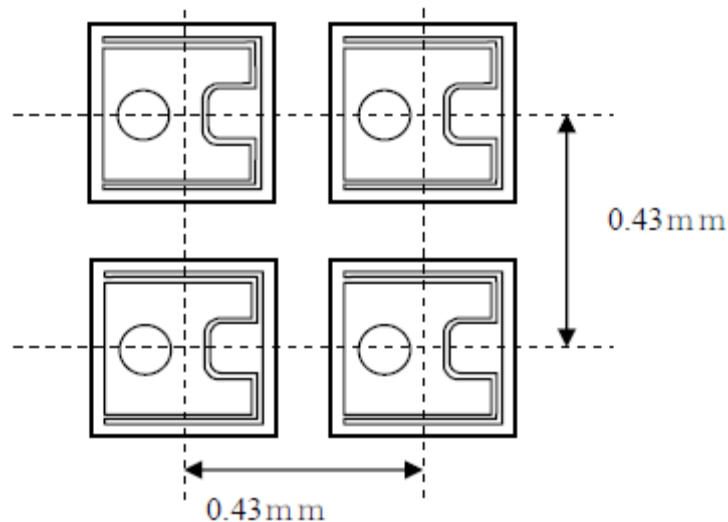
spectrum:

Ta=25℃, I_F=20 mA
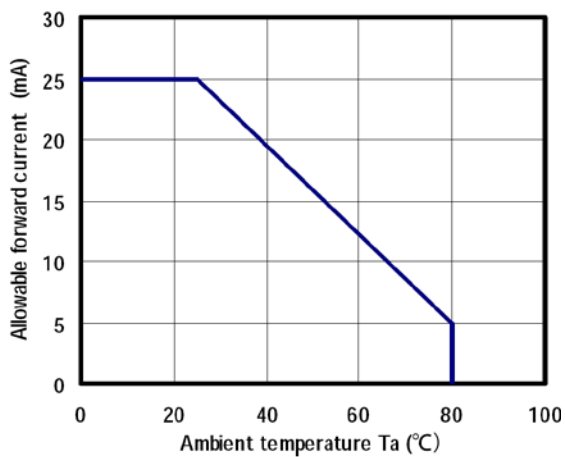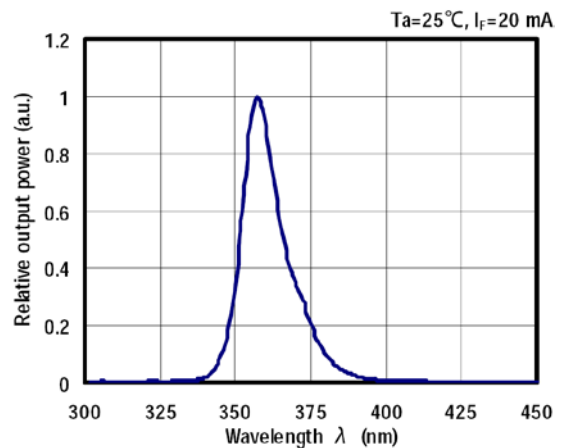
*above measurements derive from chip die packaged into resin mold LED package

Configuration

Chips are arranged on 200x200 mm adhesive sheet at 0,43mm pitch

Precaution for Use

1. Static Electricity

- The LED chip dies are very sensitive to Static Electricity and surge voltage. So it is recommended that a wrist band or an anti-electrostatic glove be used when handling the chips.
- All devices, equipment and machinery must be grounded properly. It is recommended that precautions should be taken against surge voltage to the equipment that mounts the chips.

2. Heat Generation

- Thermal design of the end product is of paramount importance. Please consider the heat generation of the chip when making the system design. The coefficient of temperature increase per input electric power is affected by the thermal resistance of the circuit board and density of chip placement on the board, as well as other components. It is necessary to avoid intense heat generation and operate within the maximum ratings given in the specification.
- The operating current should be decided after considering the ambient maximum temperature of the chip dies.