



Kyosemi Corporation, headquarter located in Kyoto, Japan, was founded in 1980 as a venture capital company. The major focus of the company is on opto semiconductor devices and solar power generation. It develops, commercializes and markets products including optical communication devices, optical sensing and control devices as well as the spherical photovoltaic solar cell Sphelar®.

## LEDs (TO-46, TO-18 and plastic mold)

Kyosemi offer a wide variety of LED devices in various wavelengths and packages. The applications are for example sensors, optical encoders, optical switches, medical and chemical applications:

- point source (870nm)
- parallel beam (660, 890nm)
- multi wavelength (660+940nm, 660+890nm, 660+940nm)
- ultraviolet (365, 373nm)
- visible (570, 660nm)
- infrared (870, 890, 950nm, 1450nm)
- plastic mold (400 to 960nm)

## InGaN UV LEDs

There is a UVA range of ultra-violet LEDs which cover various wavelengths, output powers and package styles:

**400nm (KED401M series):** The brandnew ultra-violet LED is available in two different versions with an output power of up to 22mW and just 20mA forward current. There are plastic mold packages (diameter 5.5mm) with a half angle of  $\pm 6$  and  $\pm 20$ deg.

**373nm (KED37x series):** This device is a 1.5mW LED in a hermetically sealed TO-18 case and a 1.3mW LED in a surface mount device. The applied ball lens ensures a half angle of just 12 deg. All devices offer a direct modulation with a pulse width of 100 $\mu$ s and a duty ratio of 1%.

**365nm (KED365 series):** This device is a 0.7mW LED in a hermetically sealed TO-18 case with ball lens and a 2.1mW LED in a surface mount device.

### Features:

- UVA light source
- longer life

### Applications:

- fluorescent substance detection
- bill recognition
- medical
- sensors
- photocatalytic reactions

## UV Sensors

The KPDU-x series is a highly effective PD series in GaN and Si (TO-5, 4.46x4.46mm). The GaN type KPDU-x series are further categorized into three types by peak sensitive wavelength: 315nm in KPDU31, 355nm in KPDU36 and 370nm in KPDU37. The Si Type KPDU500QW in TO-5 can offer an unfiltered detectable wavelength from 200 to 1100nm. In version KPDU500F the wavelength is limited to the UVC region (244 to 264nm) by a filter. This Photodiode is available in various package options.

### Features:

- UVA UVB UVC sensitivity
- SMD, TO-18 and TO-5 available

### Applications:

- UV sensors
- UV exposure meters
- UV source monitors
- Spectroscopy



Avoid direct eye exposure to UV light. Keep out of reach of children.

