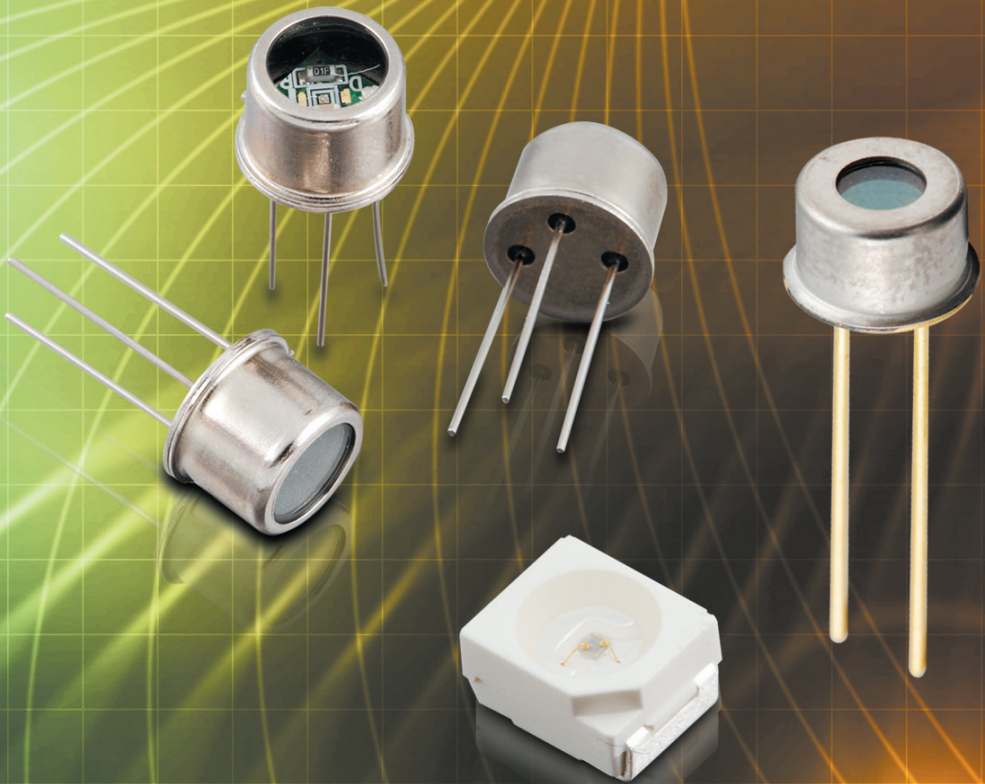


Total solutions of UV sensing



Total solutions of UV sensing



"We walk the path together!"

Since its foundation, Genicom Co., Ltd. has grown into a total solution specialist in ultra violet ray detection technology and products on the back of specialized GaN-based technology and is doing its utmost to emerge as a global sensor specialist by developing various detection and application technologies related to environment.

In particular, it aims to create a beautiful company by continuously improving technologies and services and giving back to the society so that human beings can lead a pleasant life in harmony with the environment and both customers and business partners can feel happy.

Thank you.

History

Jul.	2000	Established the company
May	2004	Initiated sensor business
Nov.	2004	Acquired ISO9001 Certificate
May	2005	Supplied parts to LG Electronics
Oct.	2005	Developed AlGaIn-based UVC sensor
Feb.	2006	Acquired ISO14001 Certificate
May	2006	Developed InGaIn-based UVA sensor
May	2007	Acquired CE Certificate (Outdoor UVI meter)
Dec.	2007	Developed UV radiometer (CE Certificate)
Apr.	2008	Relocated the HQ to Korea Advanced Institute of Science and Technology (KAIST)
Dec.	2008	Developed UVC probe
Mar.	2009	Developed GaN-based filter
Sept.	2009	Development portable UV radiometer

2000

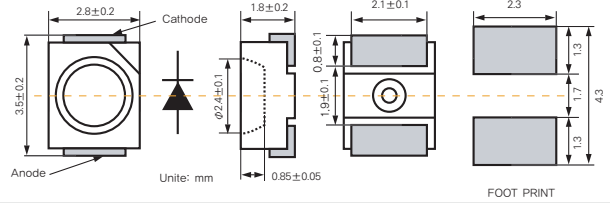
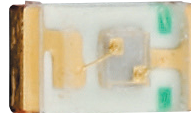
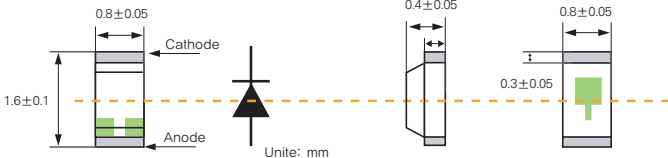
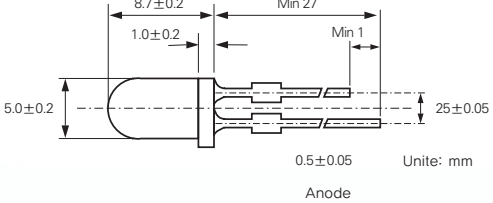
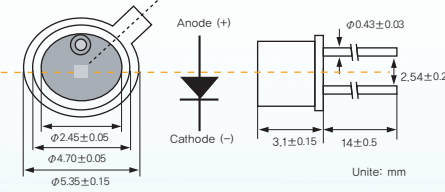
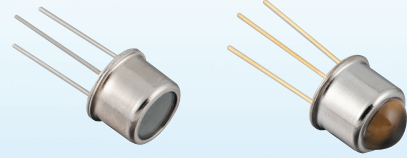
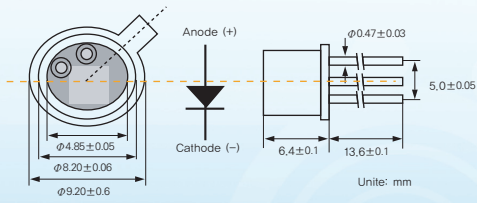
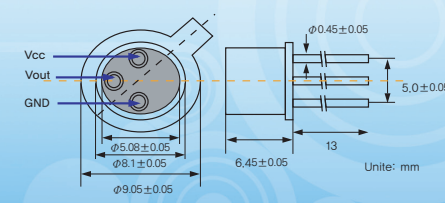
2007

2009

2004

2008

Component Type & Dimension

PKG Type	Drawing
 SMD3528	
 SMD1608	
 φ5 Mold	
 TO46	
 TO39	
 TO5	



InGaN - based UVA Sensor

Application

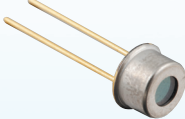
- Full UV band monitoring
- UV curing / Money detection
- Visible detection(~550nm) for blue/green LED /LD
- UV lamp /LED monitoring

Model No	Active Area (mm ²)	Detection Range (nm)	Peak Responsivity	Photocurrent at 1 mW/cm ²	Package	Window
 GUVV-S10SD	0.076	240~390	0.2 A/W at 360nm	181nA	SMD 3528	Si
 GUVV-S10GD	0.076	240~390	0.14 A/W at 350nm	136nA	SMD 3528	Quartz
 GUVV-L20SD	0.076	300~400	0.8 A/W at 350nm	287nA	Φ5 Mold	Epoxy
 GUVV-T10GD	0.076	230~395	0.12 A/W at 350nm	163nA	TO46	Quartz
 GUVV-T1BFD	0.076	320~395	0.1 A/W at 360nm	117nA	TO46	Filter

GaN - based UVA Sensor

Application

- UV Index monitoring for portable devices
- UV lamp /LED monitoring
- Flame sensing

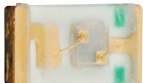
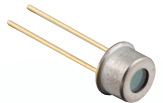
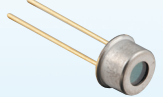
Model No	Active Area (mm ²)	Detection Range (nm)	Peak Responsivity	Photocurrent at 1 mW/cm ²	Package	Window
 GUVA-S10GD	0.076	200~370	0.15 A/W at 350nm	124nA	SMD 3528	Quartz
 GUVA-S22ED	0.076	290~370	0.12 A/W at 350nm	121nA	SMD 1608	Epoxy
 GUVA-L20SD	0.076	300~370	1.7 A/W at 350nm	1.0μA	Φ5 Mold	Epoxy
 GUVA-T11GD	0.076	220~370	0.18 A/W at 350nm	161nA	TO46	Quartz
 GUVA-T11GD-L	1.536	220~370	0.18 A/W at 350nm	3.1μA	TO46	Quartz
 GUVA-T21GD-U	6.894	220~370	0.18 A/W at 350nm	15.6μA	TO39	Quartz



AlGaN - based UVB Sensor

Application

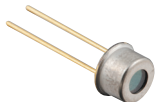
- Precise UV Index monitoring
- UVB lamp/LED monitoring
- Flame sensing

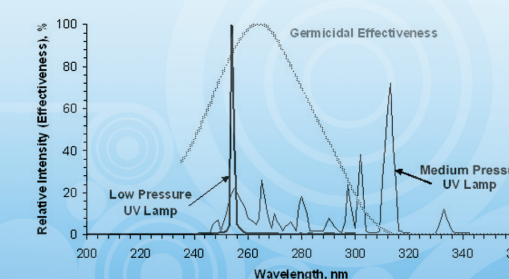
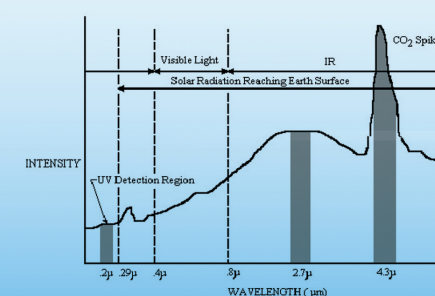
Model No	Active Area (mm ²)	Detection Range (nm)	Peak Responsivity	Photocurrent at 1 mW/cm ²	Package	Window
 GUVB-S11GD	0.076	220~320	0.14 A/W at 300nm	90nA	SMD 3528	Quartz
 GUVB-S21SD	0.076	230~320	0.13 A/W at 300nm	63nA	SMD 1608	Si
 GUVB-T11GD	0.076	220~320	0.13 A/W at 300nm	63nA	TO46	Quartz
 GUVB-T11SD	0.076	230~320	0.16 A/W at 300nm	80nA	TO46	Si
 GUVB-T1CFD	0.076	275~320	0.06 A/W at 300nm	32nA	TO46	Filter
 GUVB-T11GD-L	1.536	220~320	0.13 A/W at 300 nm	1.5 μA	TO46	Quartz
 GUVB-T21GD-U	6.894	220~320	0.13 A/W at 300 nm	7.4 μA	TO39	Quartz

AlGaN - based UVC Sensor

Application

- UV water sterilization
- UV air purification
- Flame sensing

Model No	Active Area (mm ²)	Detection Range (nm)	Peak Responsivity	Photocurrent at 1 mW/cm ²	Package	Window
 GUVC-T10GD	0.076	210~280	0.06 A/W at 254nm	34 nA	TO46	Quartz
 GUVC-T10GD-L	1.536	210~280	0.05 A/W at 254nm	0.6 μA	TO46	Quartz
 GUVC-T20BD-L	1.536	220~280	0.28 A/W at 254nm	1.6 μA	TO39	Quartz ball
 GUVC-T20GD-U	6.894	210~280	0.06 A/W at 254nm	2.7 μA	TO39	Quartz





"We walk the path together!"

UV Sensor Probe

Application

- UV water sterilization
- UV air purification
- UV curing

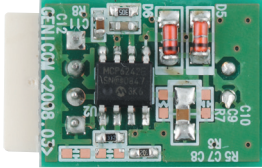
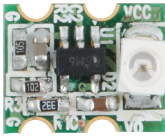
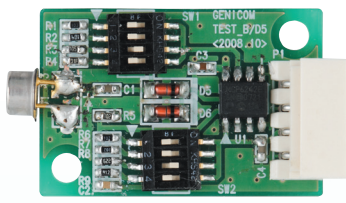
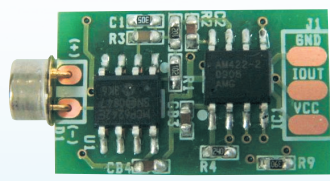
Division	Model No.	Window Type	Power Supply (V)	Output	Case Material	Size
Air	 GUVx-T1yzC-AC	X	5	0 ~ 5 V	ABS	60 x 30 x 25(mm³)
	 GUVx-T1yzC-LA1	Quartz	5	0 ~ 5 V	Al-60	45 x 30 x18(mm³)
	 GUVx-T1yzC-LA2	Quartz	5 or 9~30	0 ~ 5 V	Al-60	55 x 30 x 15(mm³)
Water	 GUVx-T1yzC-LW4	Quartz	5	0 ~ 5 V	316-L	PT3/4 ", 16mm
	 GUVx-T1yzC-LW5	Quartz	9 ~ 30	4-20mA, 0 ~ 5 V	316-L	PT1/4 ", 16mm
	 GUVx-T1yzC-LW6	Quartz	9 ~ 30	4-20mA	316-L	20mm(D) x 59mm (L)
	 GUVx-T1yzC-LW7	Quartz	5 or 9~30	4-20mA, 0 ~ 5 V	316-L	PT3/4 ", 14mm
Small	 GUVx-T2yzH	Quartz	5	0 ~ 5 V	Kovar	TO5
High Temp	 GUVx-T1yzC-LO	Quartz	5	0 ~ 5 V	Al-60	Length : 1m

*x : V(400nm), A(370nm), B(320nm), C(280nm)
*y : Improvement Level Numbering (0~9, A~Z)
*z : Window type G(glass), F(filter), S(silicon), E(epoxy)

UV Sensor Board

Application

- Test for UV sensor function
- UVI monitoring for portable devices
- Customized UV/visible sensing system

	Basic Sensor Board (GUVx-T1yzM-LA) 1. Power supply (Vcc) : DC 1.8 ~ 5.5V 2. Output voltage: 0~ Vcc 3. TO-CAN type sensor 4. UVV, UVA, UVB, UVC sensor 5. Size: 28 x 17 x 9 mm³
	Small Size Sensor Board (GUVx-SpyzM-3) 1. Power supply (Vcc): DC 1.8 ~ 5.5 V 2. Output voltage : 0 ~ Vcc 3. SMD type sensor 4. UVV, UVA, UVB sensor 5. Size: 10 x 8 x 2.8 mm³
	Test Sensor Board (GUVx-T1yzM-2) 1. Power supply (Vcc): DC 5 V 2. Output voltage: 0~5 V(Adjustable output gain with 3 orders) 3. TO-CAN type sensor 4. UVV, UVA, UVB, UVC sensor 5. Size: 36 x 22 x 7 mm³
	4-20mA Sensor Board (GUVx-T1yzM-I2) 1. Power supply (Vcc) : DC 9 ~ 30V 2. Output voltage: 4 ~ 20mA 3. TO-CAN type sensor 4. UVV, UVA, UVB, UVC sensor 5. Size: 25 x 13 x 6 mm³
	Customizing Sensor Board 1. Customizing item: Input/output/size/circuit 2. TO-CAN/SMD type sensor 3. UVV, UVA, UVB, UVC sensor

*x : V(400nm), A(370nm), B(320nm), C(280nm)
*p : Package (1 : SMD 3528, 2 : SMD1608)
*y : Improvement Level Numbering (0~9, A~Z)
*z : Window type G(glass), F(filter), S(silicon), E(epoxy)



UV Index Monitoring System

Application

- UV Index display for park, beaches, swimming pool, house
- Signboard for cosmetic shop, clothing store, ..
- UV Alarm system for the outdoor places



GUVB-S11GS-II

Outdoor UV Index Meter

1. Power supply: AC100~240V 50/60 Hz
2. Display: UV index (0~11+)
3. Both sided display
4. Watertight (IP65)
5. Size: 500mm(D) x 150 mm(T)
6. Customized size is available



GUVB-S11GC-II

UV Index Probe

1. Power supply: DC 5V
2. Output: DC 5V according to UV index
3. Precise UVB sensor with quartz dome
4. Watertight (IP65)
5. Size: 94 mm(D) x 49 mm(T)
6. Customized size is available

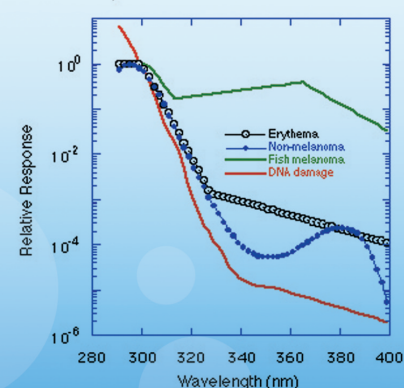


GUVB-MG02S

Indoor UV Index Meter

1. Power supply: AC100~240V 50/60 Hz
2. Display: UV index (0.0~15.0)
3. Two relay outputs
4. Output port: current(4~20mA) (option)
5. RS485 serial port (option)
6. Size: 95 x 48 x 108mm³

Action spectra for selected UV-related effects



EXPOSURE CATEGORY	UVI RANGE
LOW	< 2
MODERATE	3 TO 5
HIGH	6 TO 7
VERY HIGH	8 TO 10
EXTREME	11+

Table 1: UV radiation exposure categories



Figure 2: Recommended sun protection scheme with simple "sound bite" messages

Stationary UV Meter

Application

- UV water sterilization
- UV curing
- Management of UV Lamp /LED operation
- UV air purification
- UV intensity monitoring
- Alarm control

Model No				
	GUVx-T1yzS-oo	GUVx-T1yzS-oo	GUVx-T1yzS2-2oo	GUVx-T1yzS2-2oo
Power supply	DC 5V	AC100~240V 50/60 Hz (9V Adaptor)	AC100~240V 50/60Hz	AC100~240V 50/60Hz
Display	5digit LED	LCD	4 digit LED	4 digit LED
Feature	Absolute and Relative Intensity, Accumulated Operating Time	Absolute and Relative Intensity, Accumulated Operating Time	Absolute or Relative Intensity, Relay output Voltage(0-5V)input	Absolute or Relative Intensity, Relay output Current(4-20mA)input
Size	138 x 79 x 31 mm ³	137 x 88 x 37 mm ³	95 x 48 x 108 mm ³	95 x 48 x 108 mm ³
Option		Additional alarm board is available	4-20 mA Output, RS485	4-20 mA Output, RS485
Probe [oo]	AC01 [GUVx-T1yzC-AC] LA2 [GUVx-T1yzC-LA2]	LA2 [GUVx-T1yzC-LA2] LW4 [GUVx-T1yzC-LW4] LW7 [GUVx-T1yzC-LW7]	LA2 [GUVx-T1yzC-LA2] LW4 [GUVx-T1yzC-LW4] LW7 [GUVx-T1yzC-LW7]	LW5 [GUVx-T1yzC-LW5] LW6 [GUVx-T1yzC-LW6]
Sensor [x]	V(400nm) A(370nm) B(320nm) C(280nm)	V(400nm) A(370nm) B(320nm) C(280nm)	V(400nm) A(370nm) B(320nm) C(280nm)	C(280nm)

*y : Improvement Level Numbering (0~9, A~Z)

*z : Window type G(glass), F(filter), S(silicon), E(epoxy)