

RoHS

Specification

UVB SENSOR

SU^{*}VISEN

Seoul Viosys Co., Ltd.		
Drawn by	Checked by	Approved by

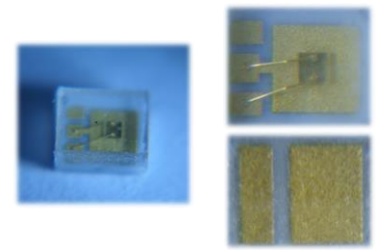
Customer		
Checked by		Approved by

SUVB-CS-S2016

SUVISEN 320

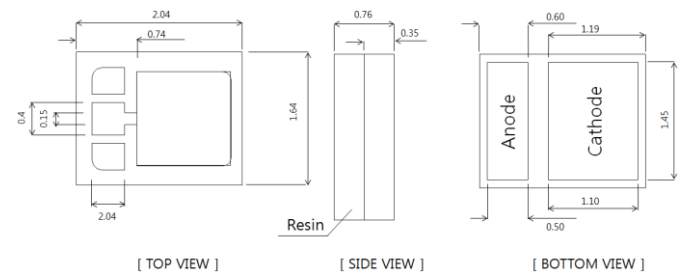


Feature AlGaN Based Material
 Active Area A = 0.121 mm²
 SMD2016 PKG / Silicon Molding type
 High UV sensitivity & Low Dark Current



Applications UV Index Monitor

Outline Diagrams and Dimensions(2016)



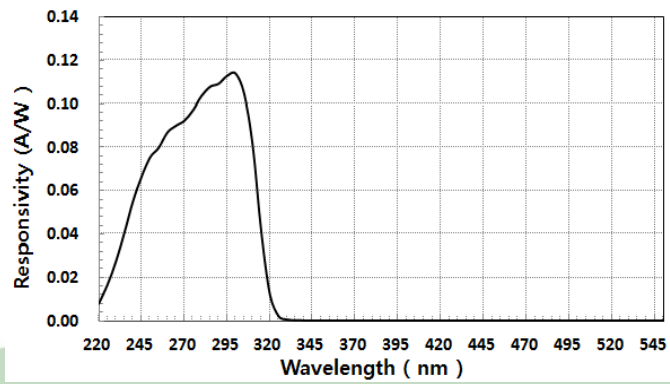
Maximum Ratings

Parameter	Symbol	Value	Unit	Remark
Operating Temperature	T _{opt}	- 40 to + 85	°C	
Storage Temperature	T _{sot}	- 40 to + 85	°C	
Soldering Temperature	T _{sol}	260	°C	Within 10sec
Reverse Voltage	V _R	3	V	

General Characteristics (@ 25°C)

Parameter	Symbol	Value (typical)	Unit	Test Conditions
Active Area	A	0.121	mm ²	400 x 400 μm ²
Responsivity	R	0.11	A/W	λ=305nm, Vr=0V
Dark Current	I _D	< 1	nA	Vr = 1V
Photo Current	I _{ph}	~ 110	nA	UVB Lamp, ~1mW/cm ²
		~ 1.2	nA	1UVI
Temperature Coefficient	I _{tc}	< 0.3	%/°C	UVB Lamp
Spectral Detection Range	λ	225 ~ 325	nm	Cut off : 10% of R

Spectral Responsivity (A/W)



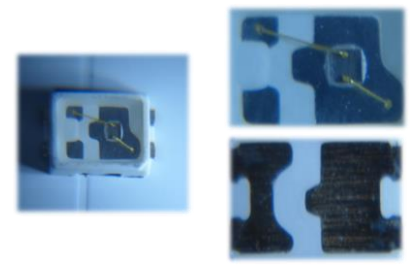
* Wrist bands or Anti-electrostatic gloves : If possible, utilize wrist bands and Anti-electrostatic gloves. This precautionary measure is to ward off ESD damage.

SUVB-CS-S3020

SUVISEN 320

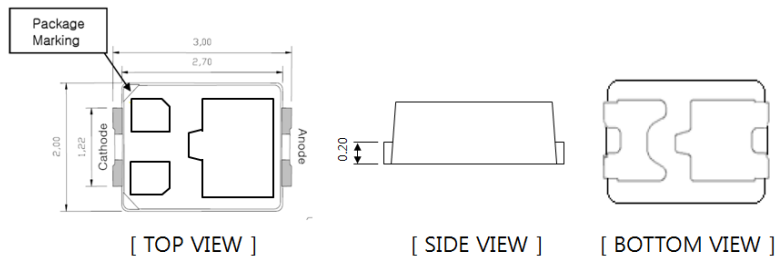


Feature AlGaIn Based Material
 Active Area A = 0.121 mm²
 SMD3020 PKG / Silicon Molding type
 High UV sensitivity & Low Dark Current



Applications UV Index Monitor

Outline Diagrams and Dimensions(3020)



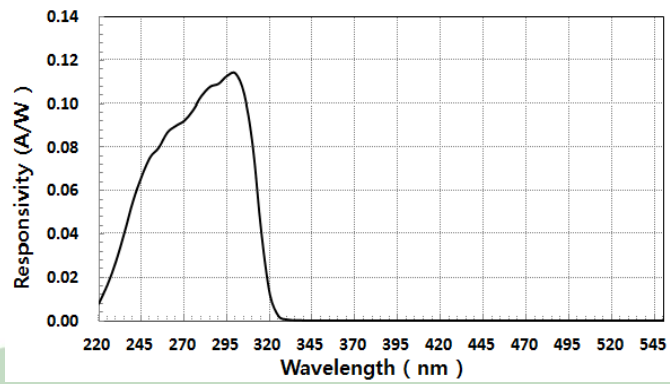
Maximum Ratings

Parameter	Symbol	Value	Unit	Remark
Operating Temperature	T _{opt}	- 40 to + 85	°C	
Storage Temperature	T _{sot}	- 40 to + 85	°C	
Soldering Temperature	T _{sol}	260	°C	Within 10sec
Reverse Voltage	V _R	3	V	

General Characteristics (@ 25°C)

Parameter	Symbol	Value (typical)	Unit	Test Conditions
Active Area	A	0.121	mm ²	400 x 400 μm ²
Responsivity	R	0.11	A/W	λ=305nm, Vr=0V
Dark Current	I _D	< 1	nA	Vr = 1V
Photo Current	I _{ph}	~ 110	nA	UVB Lamp, ~1mW/cm ²
		~ 1.2	nA	1UVI
Temperature Coefficient	I _{tc}	< 0.3	%/°C	UVB Lamp
Spectral Detection Range	λ	225 ~ 325	nm	Cut off : 10% of R

Spectral Responsivity (A/W)



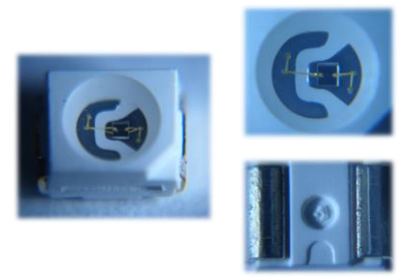
* Wrist bands or Anti-electrostatic gloves : If possible, utilize wrist bands and Anti-electrostatic gloves.
 This precautionary measure is to ward off ESD damage.

SUVB-CS-S3528

SUVISEN 320

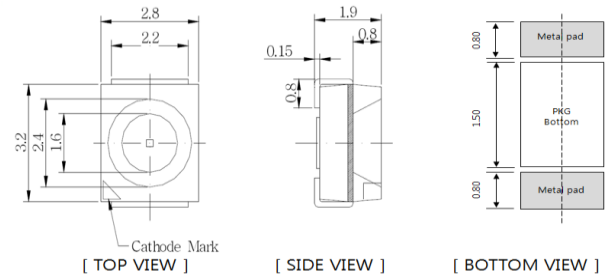


Feature AlGaN Based Material
 Active Area A = 0.121 mm²
 SMD3528 PKG / Silicon Molding type
 High UV sensitivity & Low Dark Current



Applications UV Index Monitor

Outline Diagrams and Dimensions(3528)



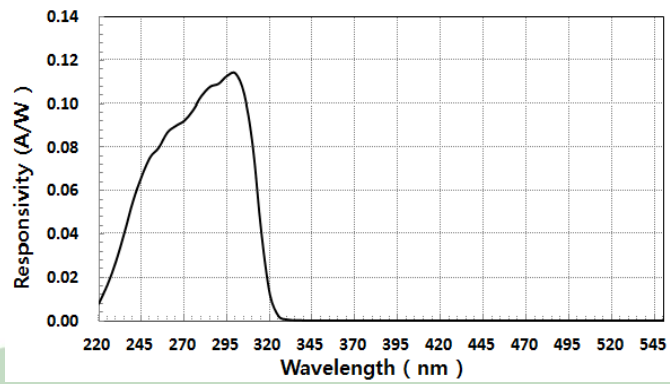
Maximum Ratings

Parameter	Symbol	Value	Unit	Remark
Operating Temperature	T _{opt}	- 40 to + 85	°C	
Storage Temperature	T _{sot}	- 40 to + 85	°C	
Soldering Temperature	T _{sol}	260	°C	Within 10sec
Reverse Voltage	V _R	3	V	

General Characteristics (@ 25°C)

Parameter	Symbol	Value (typical)	Unit	Test Conditions
Active Area	A	0.121	mm ²	400 x 400 μm ²
Responsivity	R	0.11	A/W	λ=305nm, Vr=0V
Dark Current	I _D	< 1	nA	Vr = 1V
Photo Current	I _{ph}	~ 110	nA	UVB Lamp, ~1mW/cm ²
		~ 1.2	nA	1UVI
Temperature Coefficient	I _{tc}	< 0.3	%/°C	UVB Lamp
Spectral Detection Range	λ	225 ~ 325	nm	Cut off : 10% of R

Spectral Responsivity (A/W)

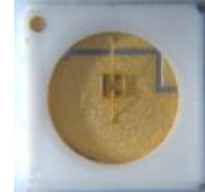


* Wrist bands or Anti-electrostatic gloves : If possible, utilize wrist bands and Anti-electrostatic gloves.
 This precautionary measure is to ward off ESD damage.

SUVB-CS-S3535

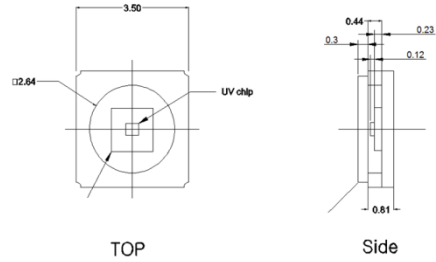
SUVISEN 320

Feature AlGaIn Based Material
 Active Area A = 0.121 mm²
 SMD3535 PKG / Quartz cover type
 High UV sensitivity & Low Dark Current



Applications UV Index Monitor
 UVB, C source Monitor

Outline Diagrams and Dimensions(3535)



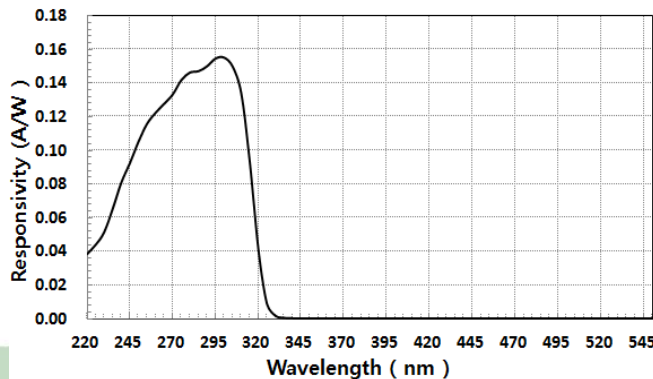
Maximum Ratings

Parameter	Symbol	Value	Unit	Remark
Operating Temperature	T _{opt}	- 40 to + 85	°C	
Storage Temperature	T _{sot}	- 40 to + 85	°C	
Soldering Temperature	T _{sol}	260	°C	Within 10sec
Reverse Voltage	V _R	3	V	

General Characteristics (@ 25°C)

Parameter	Symbol	Value (typical)	Unit	Test Conditions
Active Area	A	0.121	mm ²	400 x 400 μm ²
Responsivity	R	0.15	A/W	λ=305nm, Vr=0V
Dark Current	I _D	< 1	nA	Vr = 1V
Photo Current	I _{ph}	~ 130	nA	UVB Lamp, ~1mW/cm ²
		~ 1.5	nA	1UVI
Temperature Coefficient	I _{tc}	< 0.3	%/°C	UVB Lamp
Spectral Detection Range	λ	200 ~ 325	nm	Cut off : 10% of R

Spectral Responsivity (A/W)



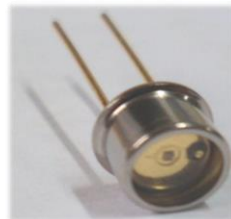
* Wrist bands or Anti-electrostatic gloves : If possible, utilize wrist bands and Anti-electrostatic gloves.
 This precautionary measure is to ward off ESD damage.

SUVB-CS-T18

SUVISEN 320

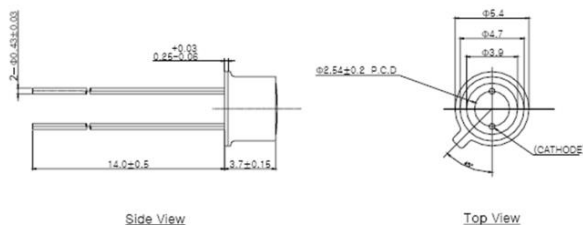


Feature AlGaN Based Material
 Active Area A = 0.121 mm²
 TOPKG / BSG type
 High UV sensitivity & Low Dark Current



Applications UV Index Monitor
 UVB, C source Monitor

Outline Diagrams and Dimensions(TOPKG)



BSG : Borosilicate glass

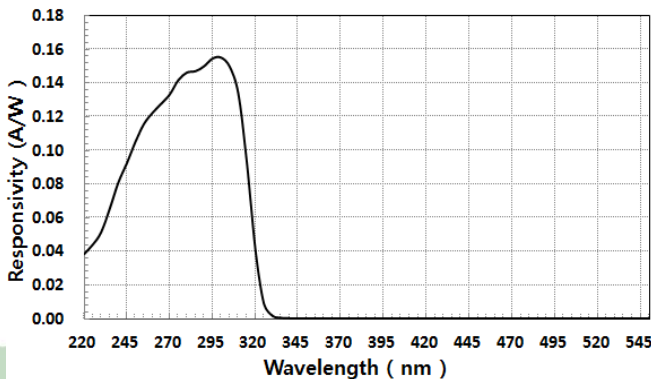
Maximum Ratings

Parameter	Symbol	Value	Unit	Remark
Operating Temperature	T _{opt}	- 40 to + 85	°C	
Storage Temperature	T _{sot}	- 40 to + 85	°C	
Soldering Temperature	T _{sol}	260	°C	Within 10sec
Reverse Voltage	V _R	3	V	

General Characteristics (@ 25°C)

Parameter	Symbol	Value (typical)	Unit	Test Conditions
Active Area	A	0.121	mm ²	400 x 400 μm ²
Responsivity	R	0.15	A/W	λ=305nm, Vr=0V
Dark Current	I _D	< 1	nA	Vr = 1V
Photo Current	I _{ph}	~ 130	nA	UVB Lamp, ~1mW/cm ²
		~ 1.5	nA	1UVI
Temperature Coefficient	I _{tc}	< 0.3	%/°C	UVB Lamp
Spectral Detection Range	λ	200 ~ 325	nm	Cut off : 10% of R

Spectral Responsivity (A/W)



* Wrist bands or Anti-electrostatic gloves : If possible, utilize wrist bands and Anti-electrostatic gloves. This precautionary measure is to ward off ESD damage.