

GaN UV Sensors

KPDU086SU27-H11Q

Characteristics

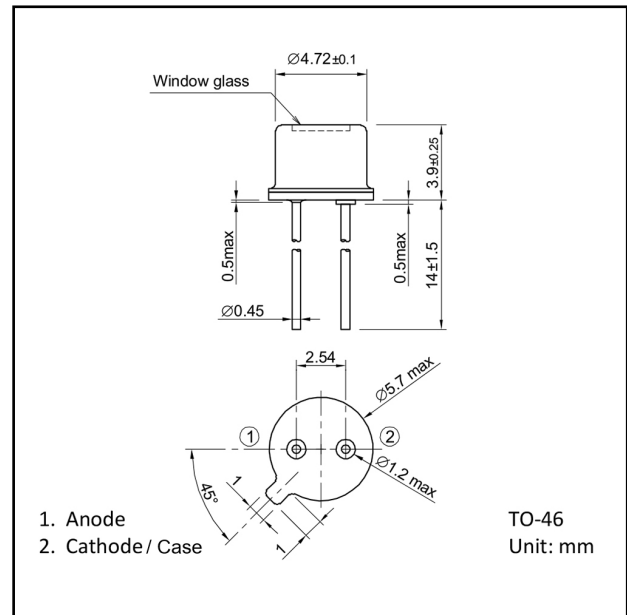
- Sensitivity covering UV-C radiations
- Large detectable area size 0.86mm sq.
- Hermetic seal type with quartz flat window for high reliability uses

Applications

- Suitable for monitoring optical intensity of sterilizing ray of Hg lamp (253.7nm)
- UV-C lasers and UV-C LEDs
- UV-C source monitors
- UV-C sensors
- UV-C exposure meters
- Medical use

Package

- TO-CAN



Preliminary

Absolute Maximum Ratings

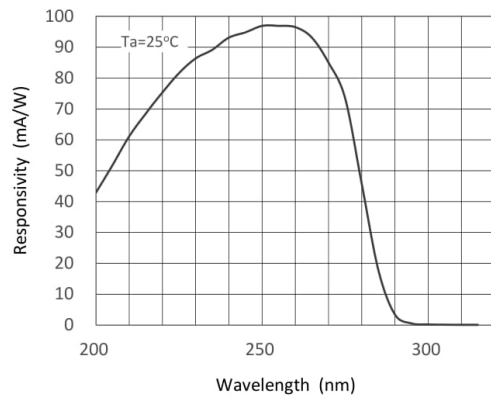
Parameter	Symbol	Value	Unit	Conditions
Reverse voltage	V_R	5	V	-
Operating temperature	T_{opr}	-40 to +80		Avoid dew condensation
Storage temperature	T_{stg}	-40 to +85		Avoid dew condensation
Soldering temperature	T_{sol}	260		Soldering time less than 5 seconds

Electrical and Optical characteristics (Ta=25 unless otherwise noted)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Active area	S	-	0.86x0.86	-	mm ²	-
Sensitive wavelength		200	-	290	nm	-
Responsivity	R	-	95	-	mA/W	$V_R=0V$ $\lambda=254nm$
Dark current	I_D	-	1	-	nA	$V_R=1V$
Terminal capacitance	C_t	-	150	-	pF	$V_R=0V$ f=1MHz

Preliminary

Spectral Responsivity



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