

# Si Photodiode Arrays

# KPD3212

#### Characteristics

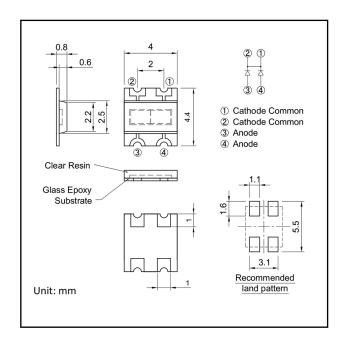
- Dual element photodiode
- Transparent epoxy mold
- Miniature surface mounting type

## **Applications**

- Sensors
- Industrial controls

## Package

• SMD





## Absolute Maximum Ratings

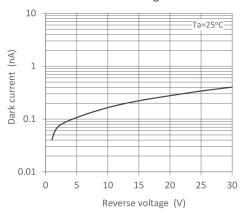
Parameter	Symbol	Value	Unit	Conditions
Reverse voltage	V <sub>R</sub>	30	V	
Reverse Current	I <sub>R</sub>	0.5	mA	One element
Forward current	I <sub>F</sub>	10	mA	One element
Operating temperature	$T_{opr}$	-20 to +85		Avoid dew condensation
Storage temperature	$T_{stg}$	-20 to +100		Avoid dew condensation
Soldering temperature	$T_{sol}$	260		Soldering time less than 3 seconds

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

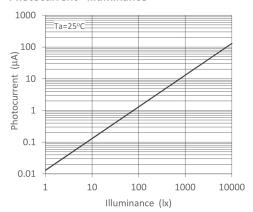
Parameter	Symbol	Min.	Тур.	Max.	Unit	Conditions
Active area	S	-	1.5x1.0	-	mm2	One element
Sensitive wavelength		400	880( p)	1100	nm	p=Peak wavelength
Short Circuit Current	I <sub>sh</sub>	-	13	-	μΑ	1000lx @2856k
Dark current	I <sub>D</sub>	_	_	10	nA	V <sub>R</sub> =5V
Dark current	ď	-	-	10		
Terminal capacitance	C <sub>t</sub>	-	20	-	pF	V <sub>R</sub> =5V f=1MHz
Half angle	2	-	130	-	deg.	-



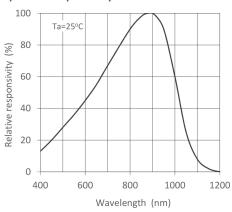
#### **Dark Current - Reverse Voltage**



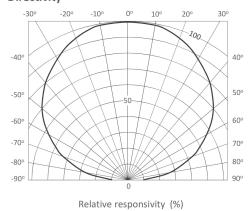
### **Photocurrent - Illuminance**



### **Spectral Responsivity**



### Directivity





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