

800nm APD single tube series

SKU :GD5210Y-1-2-T046 / GD5210Y-1-5-T046 /GD5210Y-1-2-LCC3 /GD5210Y-1-5-LCC3

OVERVIEW

The device is a silicon avalanche photodiode with a spectral response range from visible to near-infrared and a peak response wavelength of 800 nm.

FEATURES

Ortho-illuminated planar chip structure

High speed response

High gain

Low junction capacitance

Low noise

APPLICATION

Laser Ranging

LIDAR

Laser Warning



OPTICAL CHARACTERISTICS (@Ta=22±3°C)

Model		GD5210Y-1-2-T046	GD5210Y-1-5-T046	GD5210Y-1-2-LCC3	GD5210Y-1-5-LCC3
Package type		TO-46	TO-46	LCC3	LCC3
Diameter of photosensitive surface(mm)		0.23	0.50	0.23	0.50
Spectral response range(nm)		400~1100	400~1100	400~1100	400~1100
Peak response wavelength(nm)		800	800	800	800
Responsiveness $\lambda=800\text{nm}$ $\Phi=1\mu\text{W}$ $M=100(\text{A/W})$		55	55	55	55
Dark current $M=100(\text{nA})$	Typical	0.05	0.10	0.05	0.10
	Maximum	0.2	0.4	0.2	0.4
Response time $\lambda=800\text{nm}$ $R1=50\Omega(\text{ns})$		0.3	0.3	0.3	0.3
Operating voltage temperature coefficient $T=-40^{\circ}\text{C}\sim 85^{\circ}\text{C}(\text{V}/^{\circ}\text{C})$		0.5	0.5	0.5	0.5
Total Capacitance $M=100$ $f=1\text{MHz}(\text{pF})$		1.5	3.0	1.5	3.0
Breakdown voltage $\text{IR}=10\mu\text{A}(\text{V})$	Min	80	80	80	80
	Max	160	160	160	160