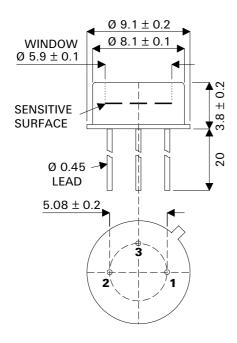


SMP525G-FJ

MECHANICAL DATA

Dimensions in mm.



TO-39 Package

Pin 1 – Anode

Pin 2 - Cathode

Pin 3 - Case

P.I.N. PHOTODIODE

FEATURES

- EXCELLENT LINEARITY
- LOW NOISE
- PHOTODIODE ISOLATED FROM PACKAGE
- WIDE SPECTRAL RESPONSE
- WIDE INTRINSIC BANDWIDTH
- WIDE VIEWING ANGLE
- LOW LEAKAGE CURRENT
- LOW CAPACITANCE
- INTEGRAL OPTICAL FILTER OPTION note 1
- TO18 HERMETIC METAL CAN PACKAGE
- EMI SCREENING MESH AVAILABLE

DESCRIPTION

The SMP400G-CA contains a Silicon P.I.N. photodiode incorporated in a compact, low profile, hermetic metal can package. The electrical terminations are via three leads of diameter 0.008" on a pitch centre diameter of 0.1". The photodiode is electrically isolated from the package, which has a separate earth lead.

The photodiode structure has been optimised for high sensitivity, high speed light measurement applications. The wide viewing angle provides relatively even reception over a large area. The metal can, isolated photodiode and optional screening mesh ensure a rugged device with a high degree of immunity to conducted and radiated electrical interference.

ABSOLUTE MAXIMUM RATINGS ($T_{case} = 25$ °C unless otherwise stated)

Operating temperature range	-40°C to +70°C
Storage temperature range	-45°C to +80°C
Temperature coefficient of responsively	0.35% per °C
Temperature coefficient of dark current	x2 per 8°C rise
Reverse breakdown voltage	60V

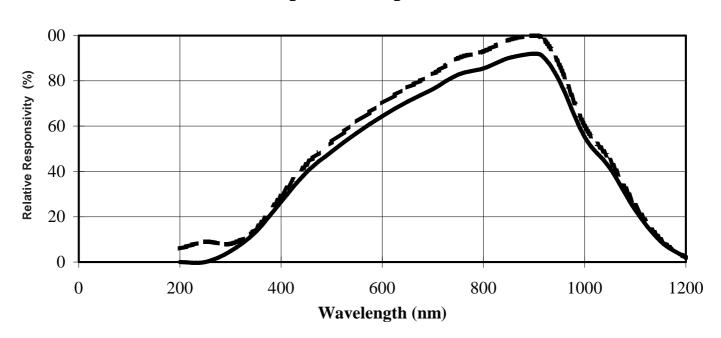




$\textbf{CHARACTERISTICS} \; (\texttt{T}_{amb} \texttt{=} 25^{\circ} \texttt{C} \; \texttt{unless otherwise stated})$

Characteristic	Test Conditions.		Min.	Тур.	Max.	Units	
Responsively	λ at 900nm		0.45	0.55		A/W	
Active Area				2.05		mm²	
Dark Current	E = 0 Dark	1V Reverse		0.25	4	nA	
Dark Current	E = 0 Dark	10V Reverse		4	10		
Breakdown Voltage	E = 0 Dark	10µA Reverse	60	80		V	
Capacitance	E = 0 Dark	0V Reverse		45		pF	
Сараспапсе	E = 0 Dark	20V Reverse		6] Pi	
Rise Time	30V Reverse					nc	
	50Ω					ns	
NEP	900nm				0.45	W/√Hz	

Spectral Response



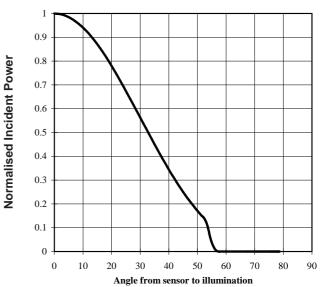


SMP525G-FJ

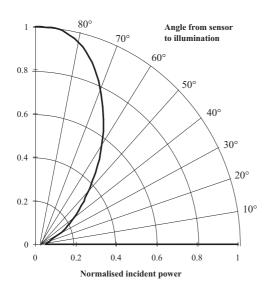
Normalised Incident Power

Directional Characteristics 0.9 0.8 0.7 0.6 0.5 0.4 0.3 0.2 0.1 0 0 10 40 70 80 90 20 30 50 60 Angle from sensor to illumination

Directional Characteristics



Directional characteristics



Directional characteristics

