

Detector Assembly EPM-2001

Silicon Photodiode
Ceramic Substrate
Oximetry Component



The **EPM-2001 Detector Assembly** uses a silicon planar diffused photodiode specially designed for medical applications. It features high efficiency and fast response. The EPM-2001 Detector Assembly is spectrally matched to Emitter Assemblies ELM-3001, ELM-3002, ELM-3003, and ELM-3004.

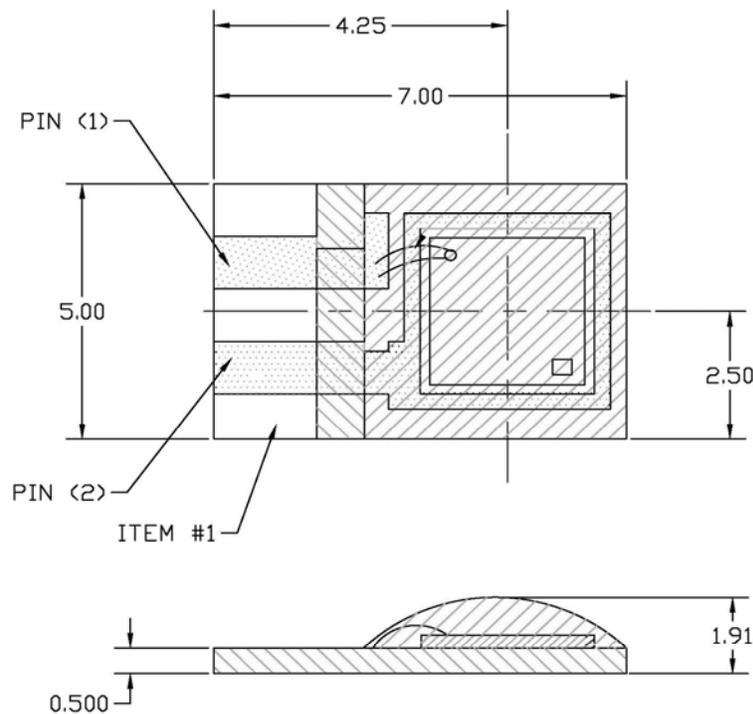
FEATURES

- Fast Response
- Matched to 660nm Emitters
- High Efficiency
- Ceramic Substrate
- Active Area: 8mm²
- Compact 5mm x 7mm Package

APPLICATIONS

- Pulse Oximetry
- Finger/Ear Probes
- Soft Silicone Sensors

Dimensions

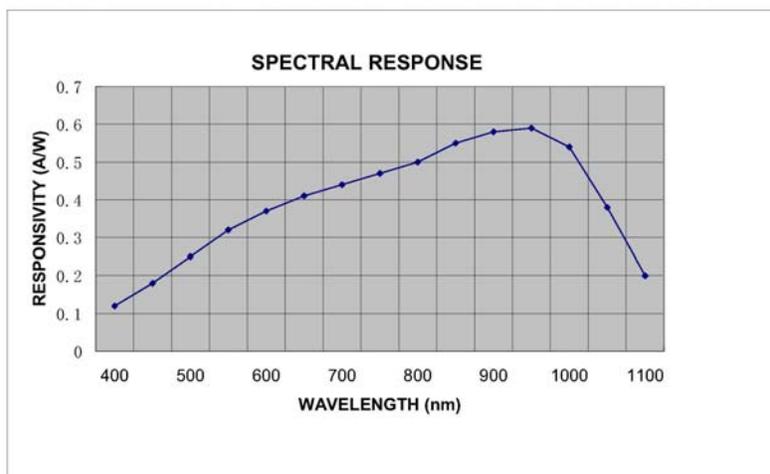


ACTIVE AREA: 8.07 mm²
CHIP SIZE: 3.175mm X 3.175mm
PACKAGE SIZE: 5mm X 7mm

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Specifications & Ratings

Parameter @ 25°C	Symbol	Conditions	Min.	Typ.	Max.	Absolute	Unit
Power Dissipation	P_d					150	mW
Operating Temperature	T_{opr}					-55~+70	°C
Storage Temperature	T_{stg}					-55~+70	°C
Soldering Temperature	T_{sol}					260	°C
Forward Voltage	V_f	$I_r=100\mu A$		50			V
Reverse Voltage	V_r	$I_r=100\mu A$			0.70		V
Shunt Resistance	R_{sh}	$\pm 10mV$	40				m Ω
Capacitance	C_t	$V_r=0V$			70		pF
Spectral Sensitivity	λ		400		1080		nm
Rise Time/Fall Time	T_r/T_f	$V_r=0V, R_l=50\Omega$			350		nSec
Responsivity	R	$\lambda = 540nm$	0.28				A / W
Temp. Coef. Of Isc	β_t				0.18		%



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Ordering information

Description

Detector Assembly; Ceramic; 8mm²

Part Number

EPM-2001