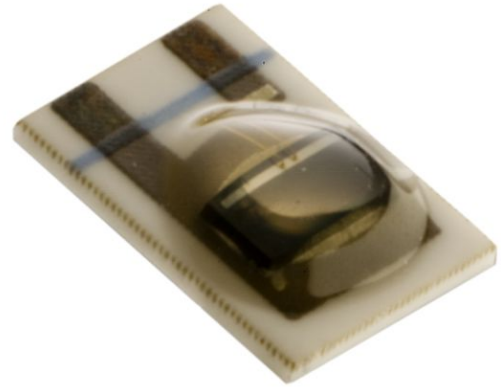


# Detector Assembly EPM-2001

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.

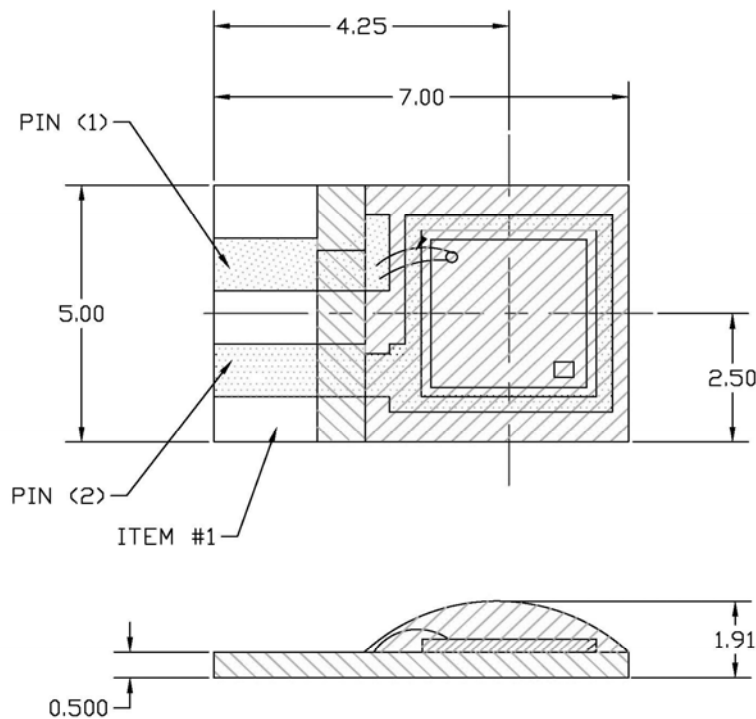
## FEATURES

- Fast Response
- Matched to 660nm Emitters
- High Efficiency
- Ceramic Substrate
- Active Area: 8mm<sup>2</sup>
- Compact 5mm x 7mm Package

## APPLICATIONS

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

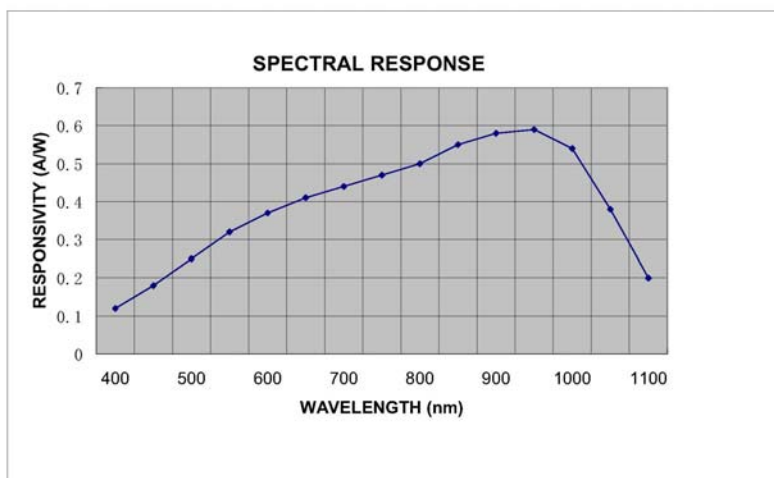
## Dimensions



ACTIVE AREA: 8.07 mm<sup>2</sup>  
CHIP SIZE: 3.175mm X 3.175mm  
PACKAGE SIZE: 5mm X 7mm

## 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				mΩ
Capacitance	$C_t$	$V_r=0V$			70		pF
Spectral Sensitivity	$\lambda$		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	$\beta_t$				0.18		%



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## Ordering information

### Description

Detector Assembly; Ceramic; 8mm<sup>2</sup>

### Part Number

EPM-2001