

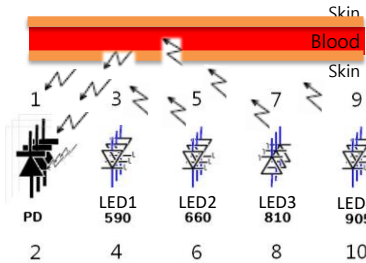
FEATURES

Integrated Quaternary Emitters and a Photo Detector
Yellow, Red, IR1, IR2 LED Lightings
Chip on Board Package

APPLICATIONS

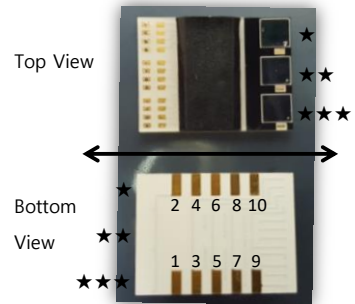
Reflective Oximeter
Wearable Device
Medical Device
PPG Authentication Device

SCHEMATIC



PACKAGE DIMENSION (mm)

w x h x t = 16.6 x 12.6 x 1.5
PAD = 1.0 x 3.0



ABSOLUTE MAX. RATINGS (Ta=25°C unless otherwise noted)

SYMBOL	PARAMETER	MAX. RATED VALUE	UNITS
PD	Power Dissipation	120	mW
IF	Continuous Forward Current	50	mA
IFP	Peak Forward Current	100	mA
VR	Reverse Voltage	5	V
T stg	Storage Temp	-20 ~ +85	°C
T opr	Operating Temp	-20 ~ +80	°C
T sd	Soldering Temperature*1	240	°C

*Soldering time : t < 3s, **Moisture Sensivity Level 3

***Prebake 150°C 2HRs if Reflow Soldering

CHARACTERISTICS (Ta=25°C unless otherwise noted)

SYMBOL	CHARACTERISCTIC	COMPONENTS	TEST CONDITION	MIN	TYP	MAX	UNITS	
VF	Forward Voltage	LED2	IF=20mA		1.9	2.2	V	
		LED4			1.3	1.5		
		LED3			1.4	1.6		
		LED1			2.1	2.5		
		PD	IF=10mA	0.5		1.3		
IR	Reverse Breakdown Current	LED1,2,3,4	VR=5V			10	uA	
P O	Output Power	LED2	IF=20mA		2		mW	
		LED4			2			
		LED3		3.8				
		LED1			2			
λ PEAK	Peak Wavelength	LED2	IF=20mA		660		nm	
		LED4			905			
		LED3			810			
		LED1			590			
		PD		940				
Δλ	Half Wave Width	LED2	IF=20mA		30		nm	
		LED4			60			
		LED3			50			
		LED1			30			
V BR	Reverse Breakdown Voltage	PD	IR=100uA	35			V	
I D	Reverse Dark Current		V R=5V			10	nA	
I L	Light Current		1mW@940nm	45			uA	
S	Spectral Response Range			400		1050	nm	
CJ	Junction Capacitance			VR=3V, f=1MHz	44			pF

PPG(Photo Plethysmogram) Characteristic

