



Reflective Blood Sensor DCM05

FEATURES

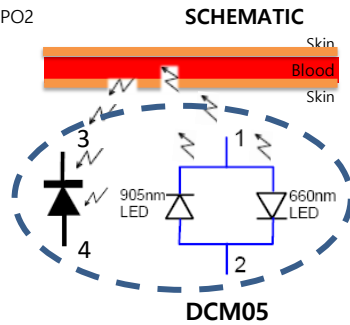
Integrated Dual Emitter and Photo Detector
Dual Red and IR LED Matched to SPO2
Hermetic Chip on Board Package

APPLICATIONS

Reflective Oximeter Probes
PPG, APG Blood Analysis
Medical Device

PACKAGE DIMENSION (mm)

w x h x t = 4.8 x 2.6 x 1.0
PAD = 0.9 x 1.1



Top View



Bottom View



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

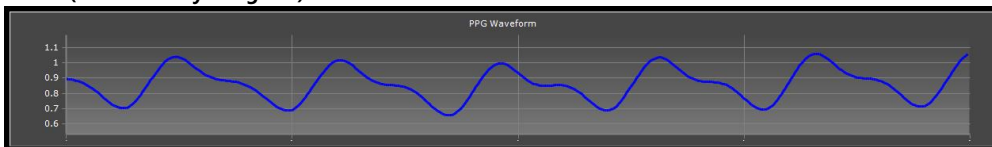
*Soldering time : t < 3s, **Moisture Sensitivity Level 3

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

CHARACTERISTICS (Ta=25°C unless otherwise noted)

SYMBOL	CHARACTERISTIC	COMPONENTS	TEST CONDITION	MIN	TYP	MAX	UNITS
VF	Forward Voltage	LED1	IF=20mA		1.9	2.2	V
		LED2			1.3	1.5	
		PD	IF=10mA	0.5		1.3	
IR	Reverse Breakdown Current	LED1,LED2	VR=5V			10	uA
P O	Output Power	LED1	IF=20mA		2		mW
		LED2			2		
λ PEAK	Peak Wavelength	LED1	IF=20mA		660		nm
		LED2			905		
		PD			940		
Δλ	Half Wave Width	LED1	IF=20mA		30		nm
		LED2			60		
V BR	Reverse Breakdown Voltage		IR=100uA	35			V
I D	Reverse Dark Current		V R=10V			20	nA
I L	Light Current	PD	1mW@940nm		21		uA
S	Spectral Response Range			400		1050	nm
CJ	Junction Capacitance		VR=3V, f=1MHz		20		pF

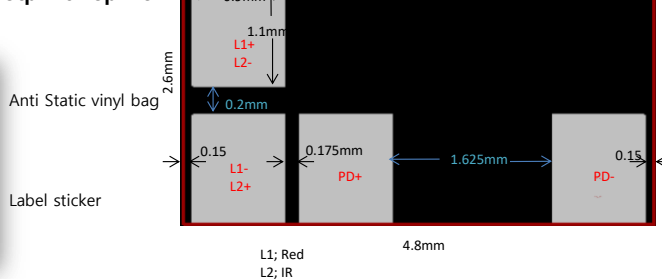
PPG(Photo Plethysmogram) Characteristic



Packing Information



Footprint Top view



L1; Red
L2; IR