



Reflective Blood Sensor DCM03

FEATURES

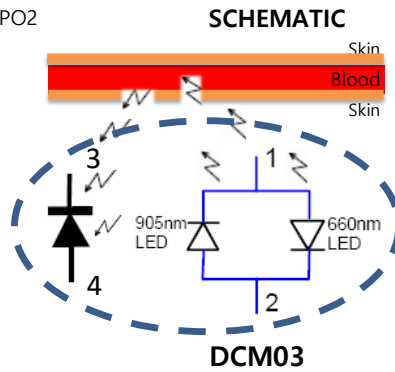
- Integrated Dual Emitter and Photo Detector
- Dual Red and IR LED Matched to SPO2
- Hermetic Chip on Board Package

APPLICATIONS

- Reflective Oximeter
- Wearable Device
- Medical Device

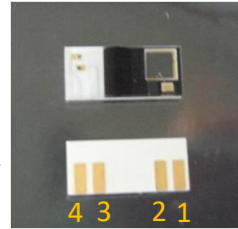
PACKAGE DIMENSION (mm)

w x h x t = 9.8 x 4.3 x 1.2
PAD = 1.1 x 2.5



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*	240	°C

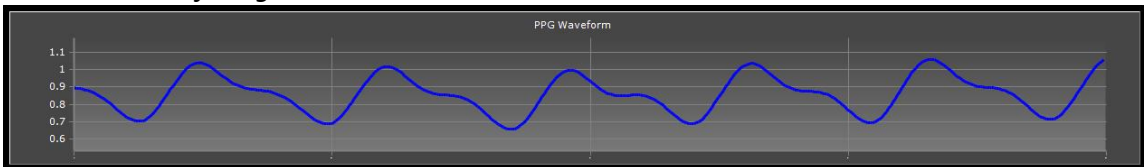
*Soldering time : t < 3s, **Moisture Sensitivity Level 3

***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	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

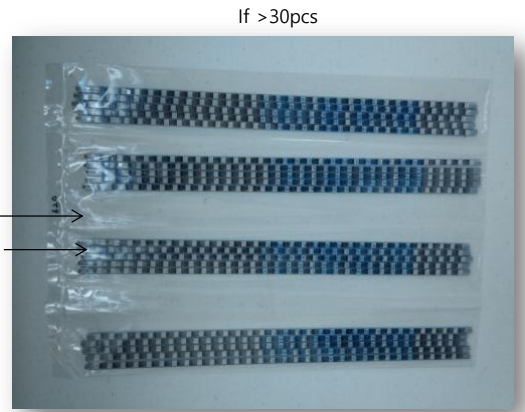
PPG(Photo Plethysmogram) Characteristic



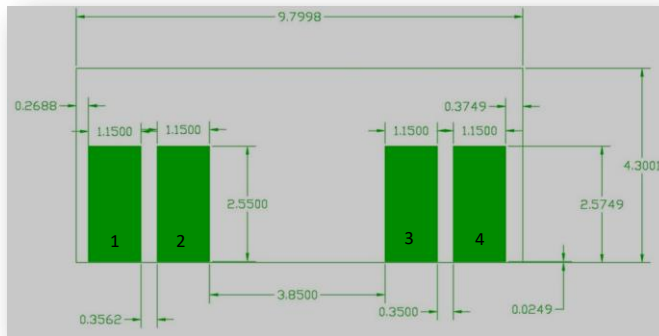
Packing Information



Keep sealing to avoid any moisture



Footprint Top view



Keep sealing to avoid any moisture

Recommended Reflow Soldering Temperature Profile

***Prebake 2HR at 150°C oven before Reflow Soldering.

