



Reflective Blood Sensor DCM06

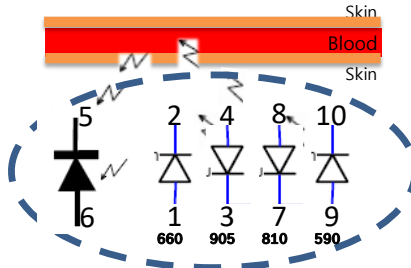
FEATURES

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

APPLICATIONS

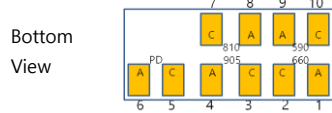
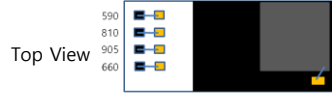
Reflective Oximeter
 Wearable Device
 Medical Device
 PPG Authencation Device

SCHEMATIC



PACKAGE DIMENSION (mm)

w x h x t = 9.7 x 4.2 x 1.2
 PAD = 1.0 x 1.2



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

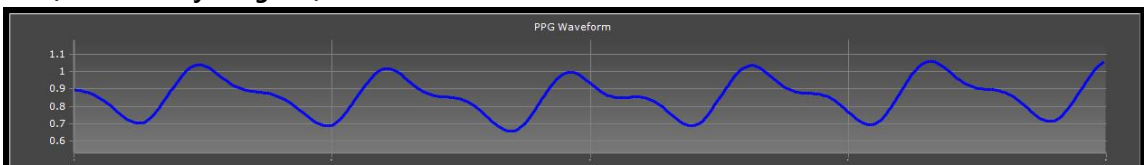
*Soldering time : t < 3s, **Moisture Sensivity Level 3

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

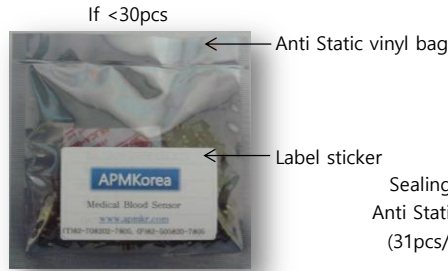
CHARACTERISTICS (Ta=25°C unless otherwise noted)

SYMBOL	CHARACTERISTIC	COMPONENTS	TEST CONDITION	MIN	TYP	MAX	UNITS
VF	Forward Voltage	LED1	IF=20mA		1.9	2.2	V
		LED2			1.3	1.5	
		LED3			1.4	1.6	
		LED4			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	LED1	IF=20mA		2		mW
		LED2			2		
		LED3		3.8			
		LED4			2		
λ PEAK	Peak Wavelength	LED1	IF=20mA		660		nm
		LED2			905		
		LED3			810		
		LED4			590		
		PD		940			
Δλ	Half Wave Width	LED1	IF=20mA		30		nm
		LED2			60		
		LED3			50		
		LED4			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

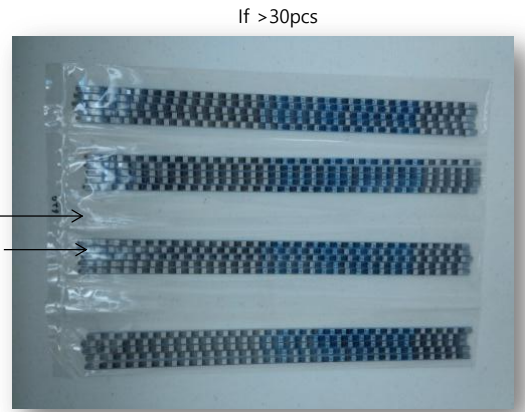
PPG(Photo Plethysmogram) Characteristic



Packing Information

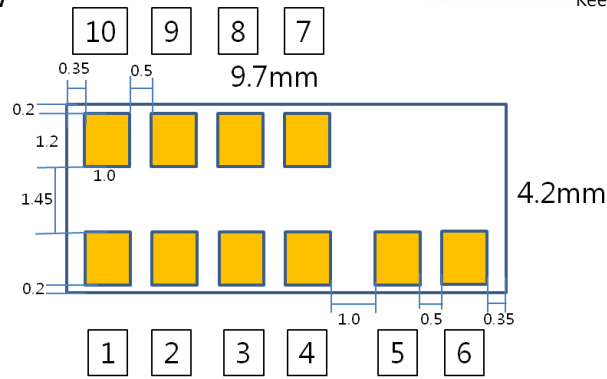


Keep sealing to avoid any moisture



Keep sealing to avoid any moisture

Footprint Top view



Recommended Reflow Soldering Temperature Profile

Soldering 235°C within 10sec
Gradual cooling to avoid quenching

