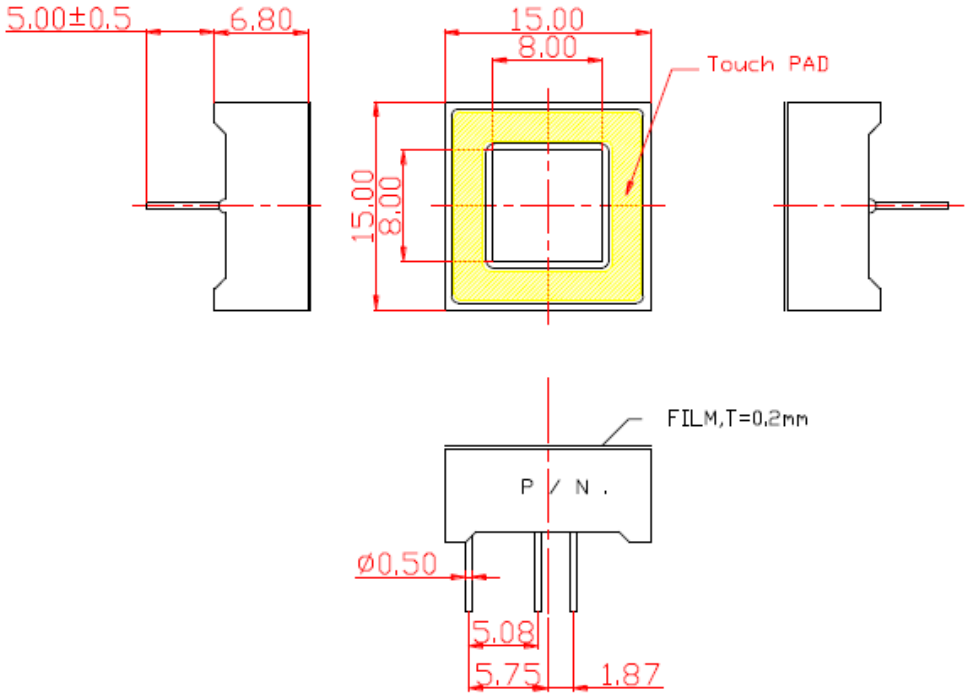
SPECIFICATIONS CTD5959Y2WB

OUTLINES DIMENSIONS



Notes:
1. All Dimensions are in millimeters (inches).
2. Tolerance is ± 0.25mm (0.01") unless otherwise noted.
3. Specifications are subject to change without notice.

Part Number	Chip Material	Color of Emission	Lens Type	Description
CTD5959Y2WB	InGaAlP	Yellow	White	Touch Display

ABSOLUTE MAXIMUM RATINGS (TA=25°C)

Parameter	Symbol	Max Rating	Unit
Power Dissipation	P_D	70	mW
Continuous Forward Current (Per Dice)	I_F	25	mA
Peak Current (Per Dice)	I_{FP}	90	mA
Reverse Voltage (Per Dice)	V_R	5	V
Operating Temperature Range	T_{OPR}	-25~+85	°C
Storage Temperature Range	T_{STG}	-25~+85	°C
Hand Soldering Condition: 360 °C/ 3sec			

OPTICAL-ELECTRICAL CHARACTERISTICS (TA=25°C)

Parameter	Symbol	Test Condition	Value			Unit
			Min	Typ	Max	
Luminous Intensity	I_V	I_F = 20mA	-	50	-	mcd
Forward Voltage	V_F	I_F = 20mA	-	2.0	2.6	V
Reverse Leakage Current	I_R	V_R = 5V	-	-	10	μA
Peak Wavelength	λ_P	I_F = 20mA	-	593	-	nm
Dominant Wavelength	λ_D	I_F = 20mA	-	590	-	nm
Spectral Radiation Bandwidth	$\Delta\lambda$	I_F = 20mA	-	20	-	nm

RoHS Compliant Lead Free

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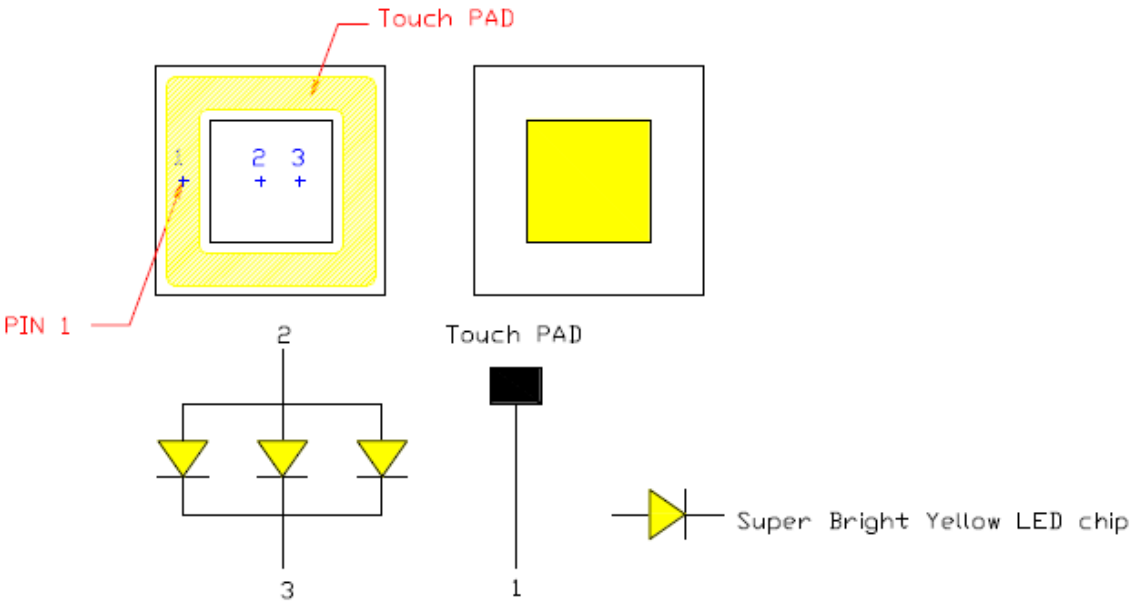
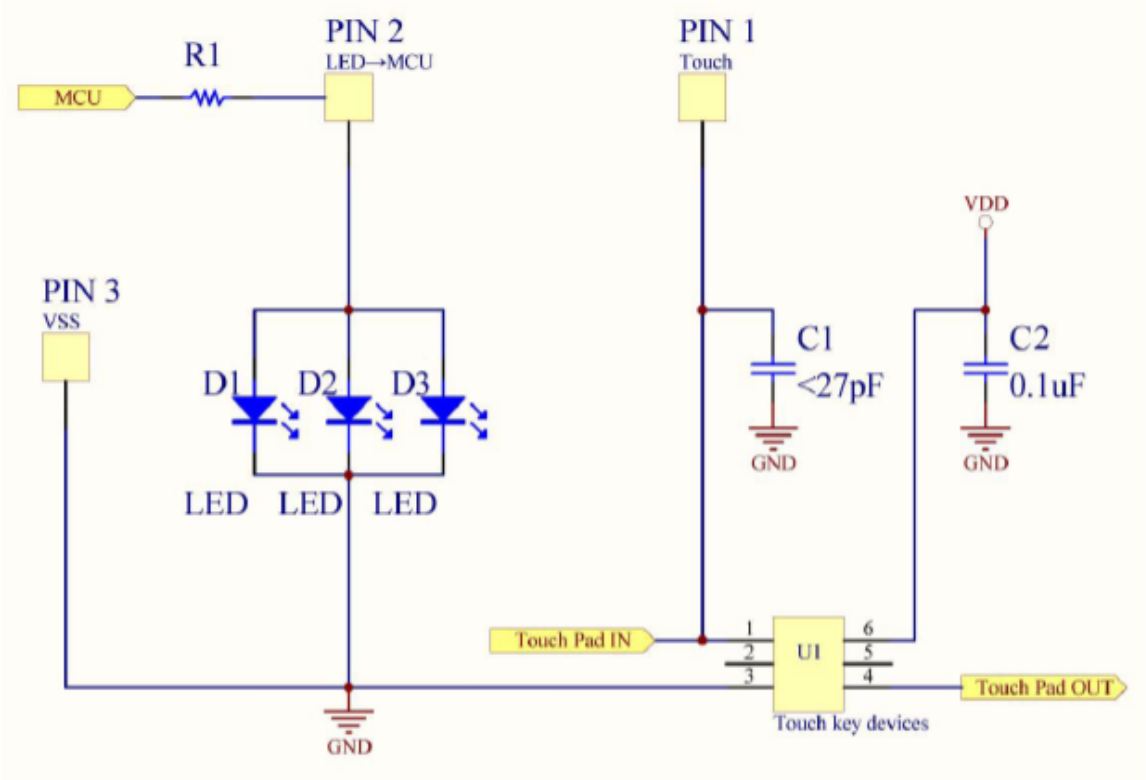
INTERNAL CIRCUIT DIAGRAMS



TYPICAL APPLICATION CIRCUITS



Internal Components are not customer accessible

OPTICAL CHARACTERISTIC CURVES

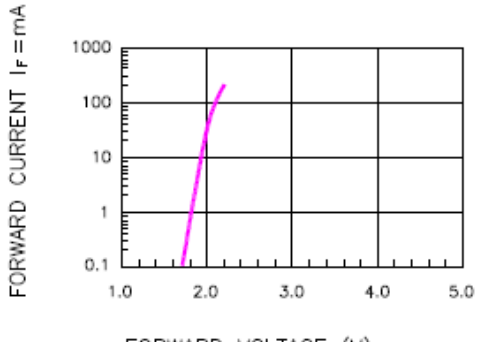


Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE

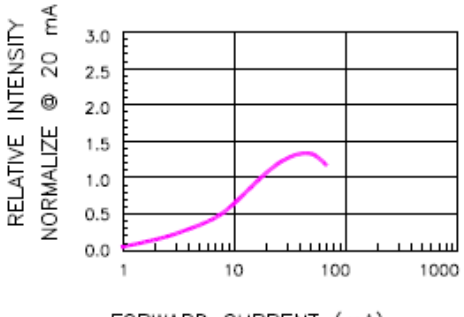


Fig.2 RELATIVE INTENSITY VS. FORWARD CURRENT

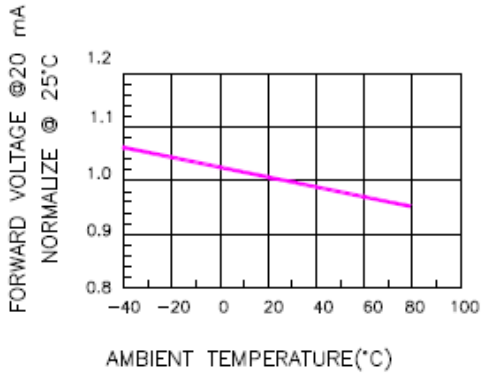


Fig.3 FORWARD VOLTAGE VS. TEMPERATURE

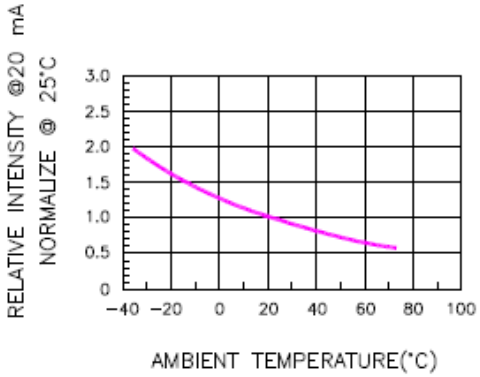


Fig.4 RELATIVE INTENSITY VS. TEMPERATURE

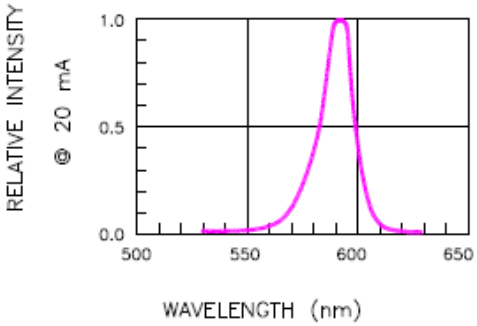


Fig.5 RELATIVE INTENSITY VS. WAVELENGTH

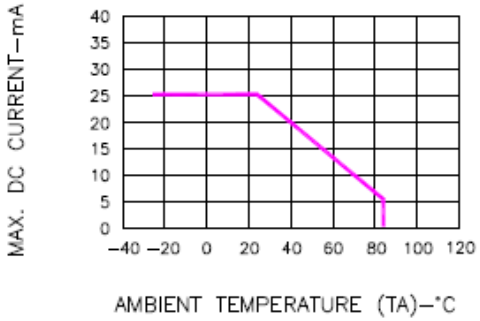


Fig.6 MAX. ALLOWABLE DC CURRENT VS. AMBIENT TEMPERATURE

RoHS Compliant
Lead Free

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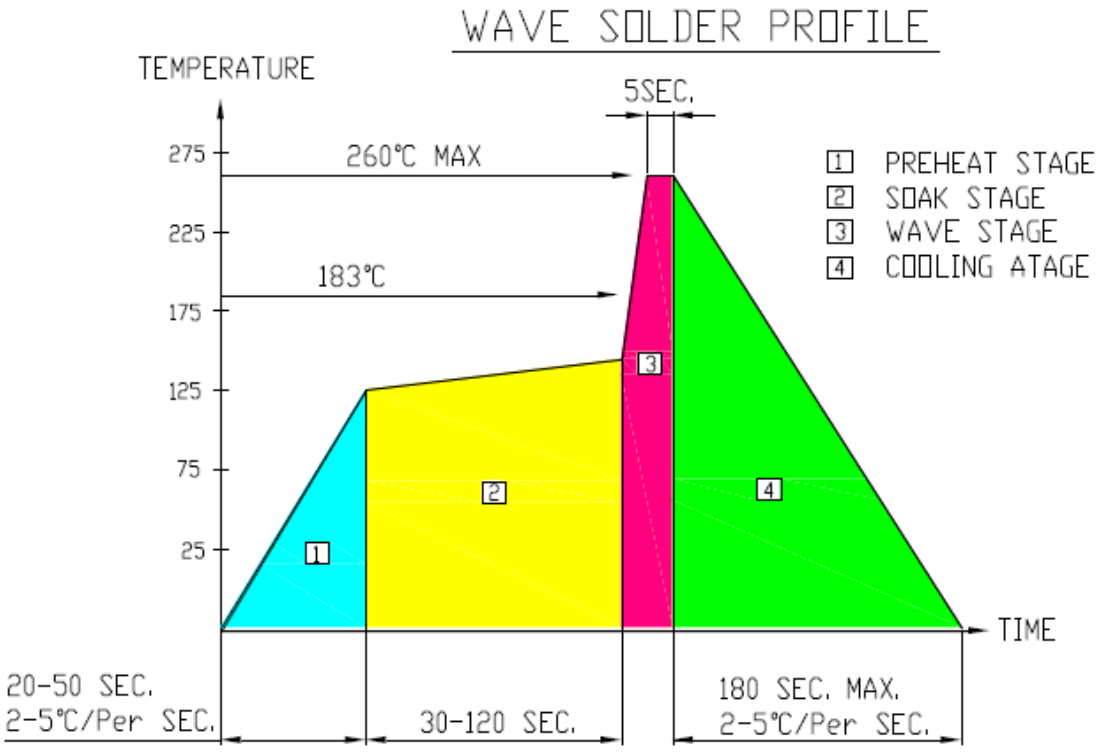
SOLDERING CHARACTERISTICS



NOTES

1. Recommend pre-heat temperature of 105°C or less (as measured with a thermocouple attached to the LED pins) prior to immersion in the solder wave with a maximum solder bath temperature of 260°C
2. Peak wave soldering temperature between 245°C ~ 225°C for 3 sec (5 sec max)
3. No more than one wave soldering pass

SOLDERING IRON

- Basic spec is ≦4 sec when 260°C. If temperature is higher, time should be shorter (+10°C→1 sec). Power dissipation of Iron should be smaller than 15W, and temperature should be controllable. Surface temperature of the device should be under 230°C

REWORK

1. Customer must finish rework within 3 sec under 350°C
2. The head of soldering iron cannot touch copper foil