

SINGLE DIGIT SMD DISPLAY(0.39")



LSSD305/6WK-XX/T

DATA SHEET

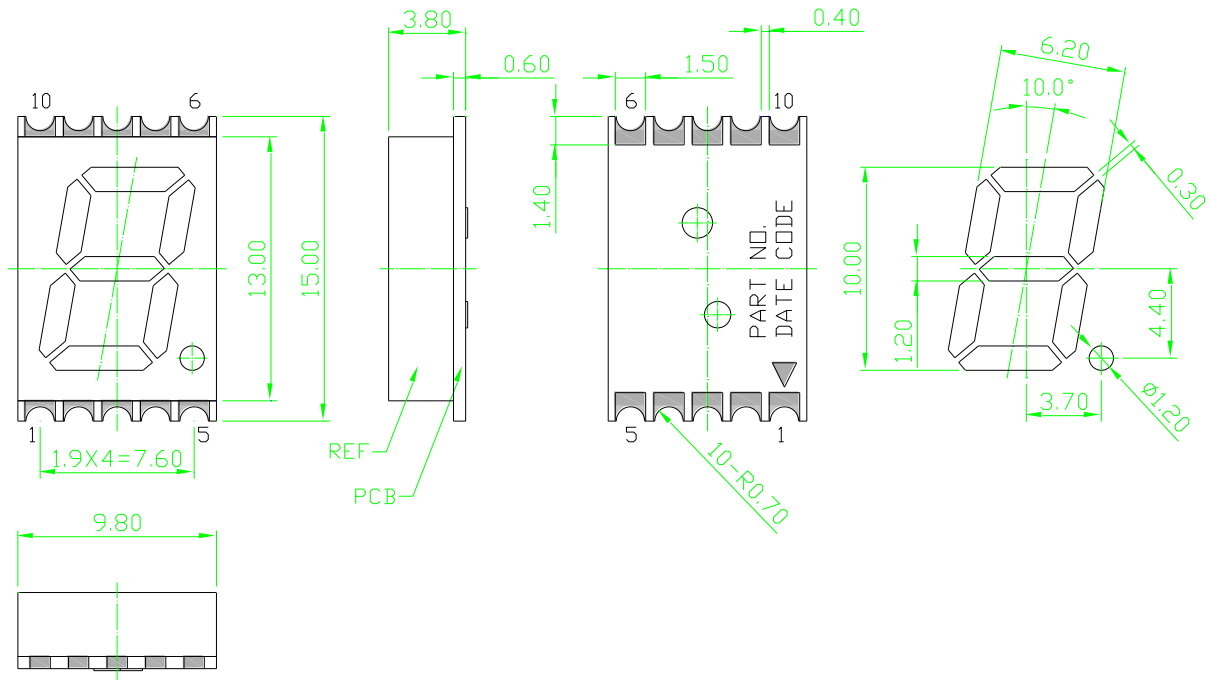
DOC.NO : QW0905-LSSD305/6WK-XX/T

REV. : C

DATE : 09 – Jan. – 2019



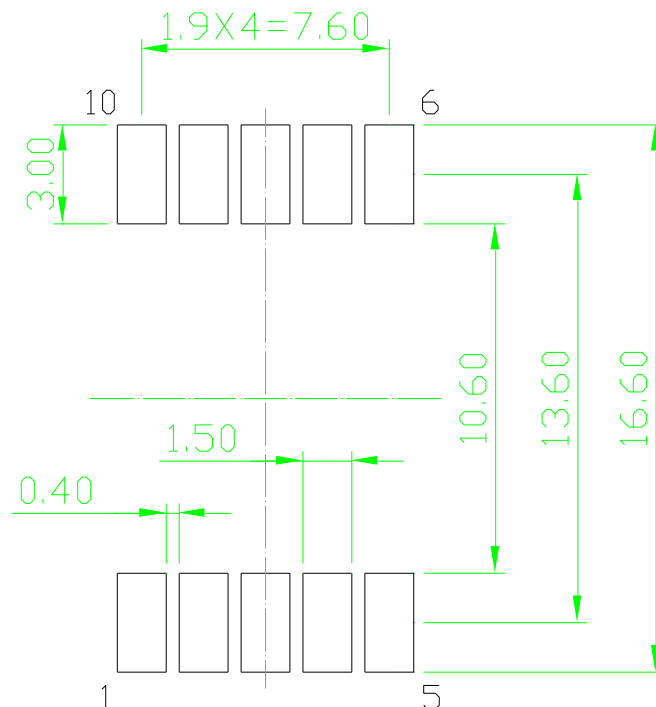
Package Dimensions



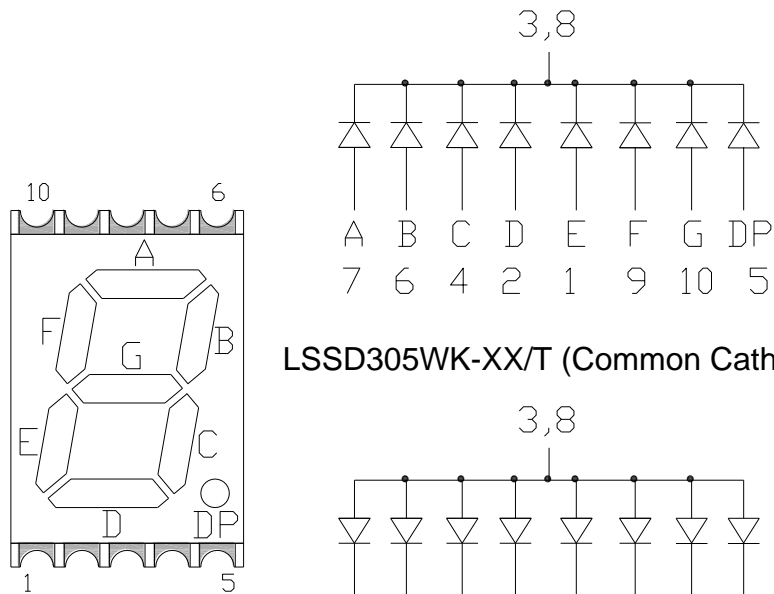
NOTE:

Dimension in millimeters (inches),
And tolerance are ± 0.25 mm (.01") specified.

Recommended Soldering Pad Dimensions



Internal Circuit Diagram



LSSD305WK-XX/T (Common Cathode)

LSSD306WK-XX/T (Common Anode)

Electrical Connection

PIN NO.	LSSD305WK-XX/T	PIN NO.	LSSD306WK-XX/T
1	Anode E	1	Cathode E
2	Anode D	2	Cathode D
3	Common Cathode	3	Common Anode
4	Anode C	4	Cathode C
5	Anode DP	5	Cathode DP
6	Anode B	6	Cathode B
7	Anode A	7	Cathode A
8	Common Cathode	8	Common Anode
9	Anode F	9	Cathode F
10	Anode G	10	Cathode G

Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Ratings	UNIT
Power Dissipation	PD	33	mW
Peak current (duty cycle 1/10, 1kHz)	I _{FP}	60	mA
Forward Current Per Chip	I _F	20	mA
Storage Temperature	T _{stg}	-40 ~ +85	°C
Operating Temperature	T _{opr}	-30 ~ +10	°C

Typical Electrical & Optical Characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Luminous Intensity	IV	112.5	----	285	mcd	IF=5mA
Chromaticity Coordinates	X	----	0.285	----	----	IF=5mA
	Y	----	0.275	----	----	IF=5mA
Forward Voltage	VF	----	2.9	3.2	V	IF=5mA
Reverse Current	I _r	----	----	10	μA	VR=5V

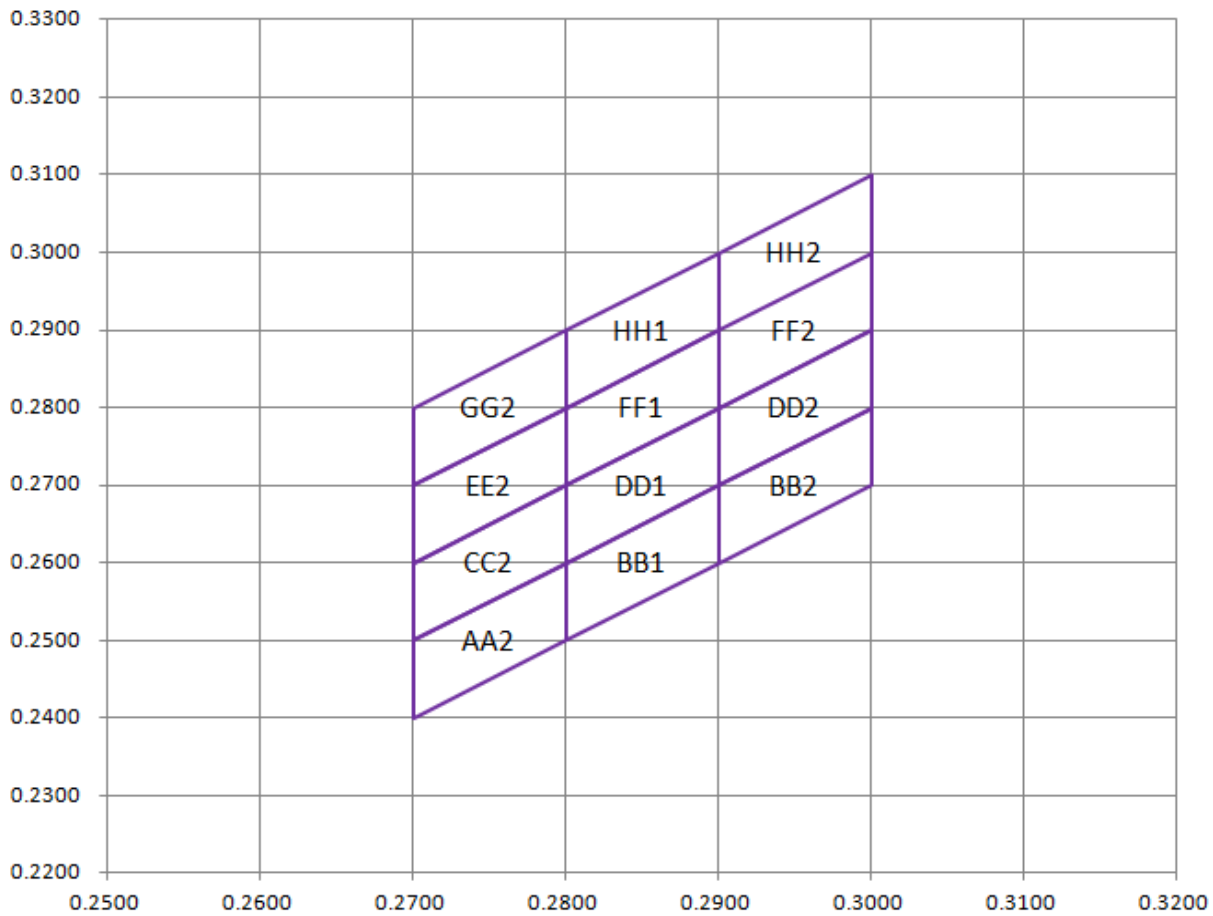
Note : 1.The forward voltage data did not including ±0.1V testing tolerance.

2.The luminous intensity data did not including ±15% testing tolerance.

Luminous Intensity Classification

BIN CODE	Iv(mcd) at 5mA	
	Min	Max
1 (R11)	112.5	126.0
2 (R12)	126.0	140.0
3 (R21)	140.0	160.0
4 (R22)	160.0	180.0
5 (S11)	180.0	202.0
6 (S12)	202.0	226.0
7 (S21)	226.0	255.5
8 (S22)	255.5	285.0

Chromaticity Classification



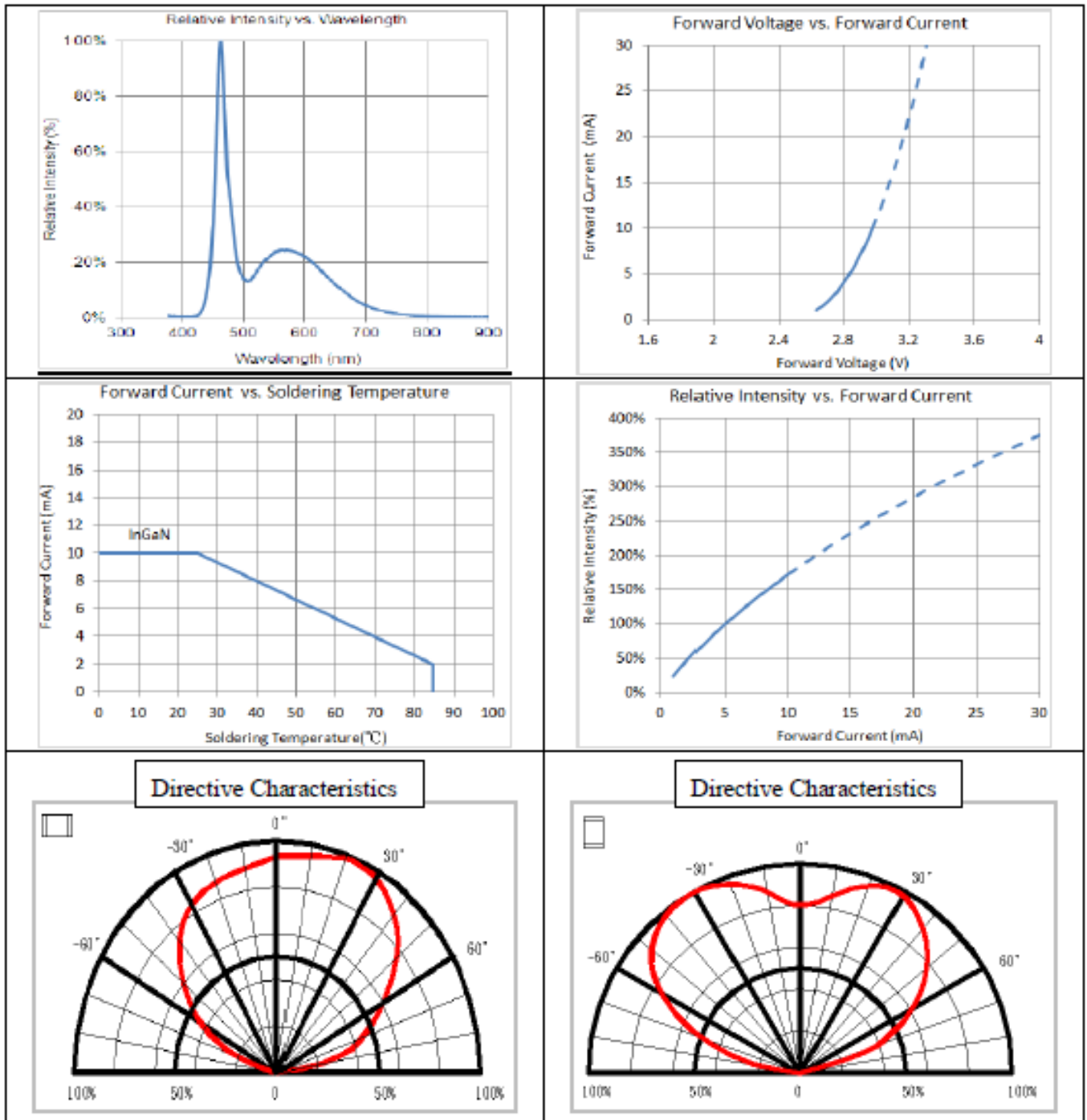
CIE	AA2	BB1	BB2	CC2	DD1	DD2
X	0.30	0.31	0.32	0.30	0.31	0.32
	0.29	0.30	0.31	0.29	0.30	0.31
Y	0.28	0.29	0.30	0.29	0.30	0.31
	0.26	0.27	0.28	0.27	0.28	0.29

CIE	EE2	FF1	FF2	GG2	HH1	HH2
X	0.30	0.31	0.32	0.30	0.31	0.32
	0.29	0.30	0.31	0.29	0.30	0.31
Y	0.30	0.31	0.32	0.31	0.32	0.33
	0.28	0.29	0.30	0.29	0.30	0.31

Typical Electro-Optical Characteristics Curve

(25 °C Free Air Temperature Unless Otherwise Specified)

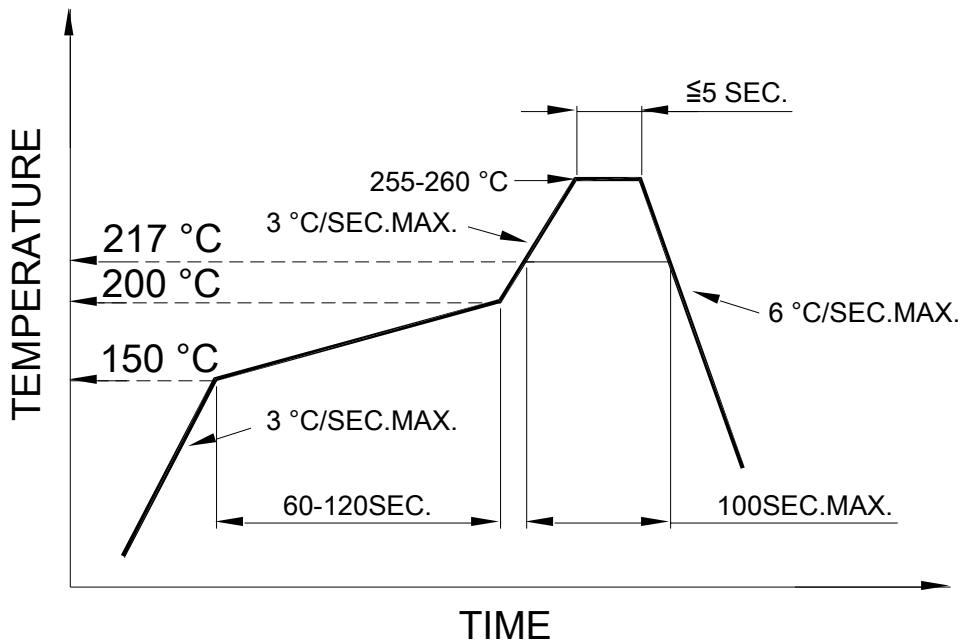
WK: Super Bright white (InGaN/GaN) CURVE



SMT REFLOW SOLDERING INSTRUCTIONS

SMT Soldering Profile

Pb free reflow soldering Profile



SOLDERING IRON

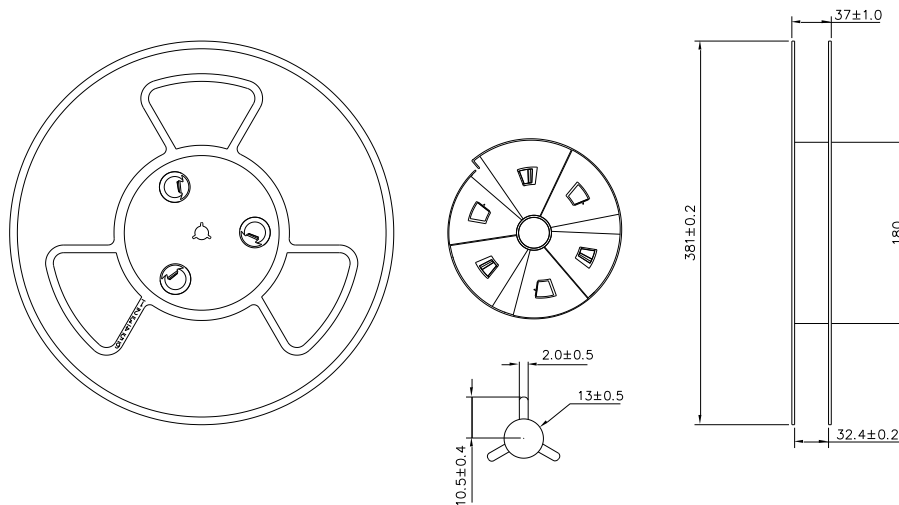
Basic spec is ≤ 4 sec when 260°C. If temperature is higher, time should be shorter (+10°C→1 sec). Power dissipation of Iron should be smaller than 15W, and temperature should be controllable. Surface temperature of the device should be under 230°C.

REWORK

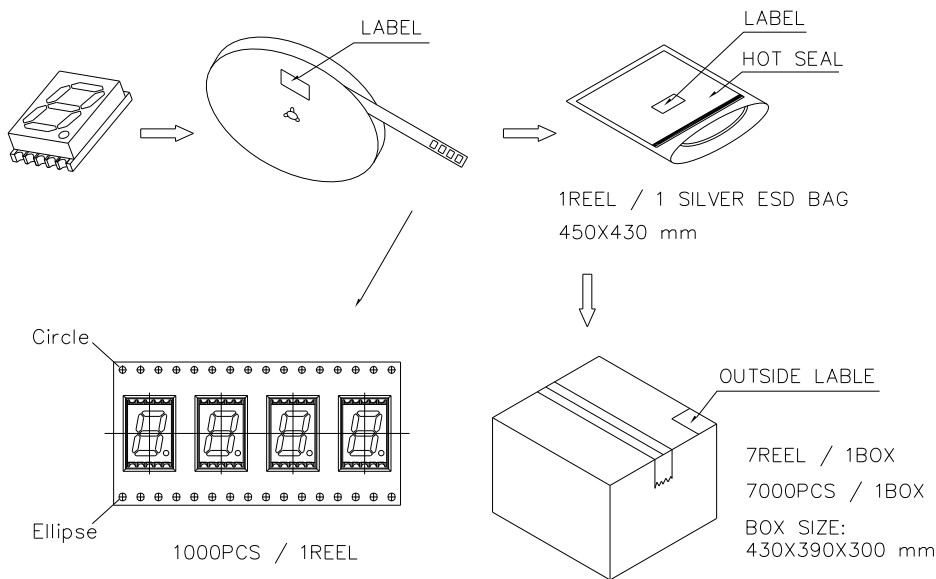
Customer must finish rework within 3 sec. under 350°C.

The head of soldering iron cannot touch copper foil.

REEL DIMENSIONS



PACKING & LABEL SPECIFICATIONS



STORAGED CONDITION

In factory original sealed bag package

TEMPERATURE CONDITION	HUMIDITY CONDITION
5°C ~ 30°C	Below 60%RH

After opened and not in factory original sealed bag package

TEMPERATURE CONDITION	HUMIDITY CONDITION	STORAGE TIME
5°C ~ 30°C	Below 60%RH	Within 4 weeks (MSL as level 2a)