SYC SEMICONDUCTORES Y COMPONENTES

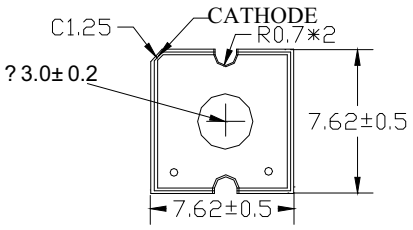
FLUX LED SPECIFICATION

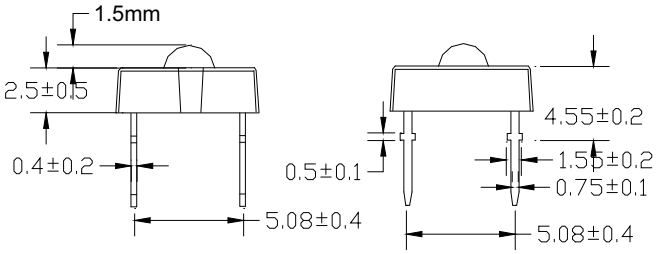
ATTENTION
OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DISCHARGE SENSITIVE DEVICES

LED-080-75103

Fatures：

- Single color
- High bright output
- High Current Operation
- Low power consumption
- High reliability and long life



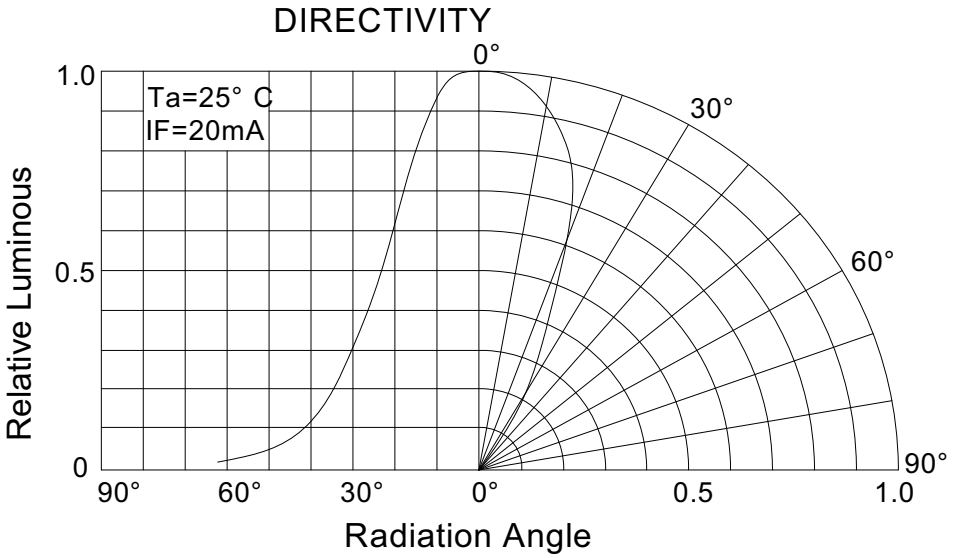


Descriptions：

- Dice material：InGaN
- Emitting Color：White
- Device Outline：7.6mmX7.6mm
- Lens Type：Water Clear

NOTE:

- All dimensions are millimetres.
- Tolerance is +/-0.25mm unless otherivise



LED SPECIFICATION

Absolute maximum ratings（Ta = 25℃）

Parameter	Symbol	Test Condition	Value		Unit
			Min.	Max.	
Reverse Voltage	V_R	I_R = 30μA	5	--	V
Forward Current	I_F	----		30	mA
Power Dissipation	Pd	----	----	75	mW
Pulse Current	Ipeak	Duty=0.1mS，1kHz	----	100	mA
Operating Temperature	Topr	----	-40	+85	℃
Storage Temperature	Tstr	----	-40	+100	℃

Electrical and optical characteristics （Ta = 25℃）

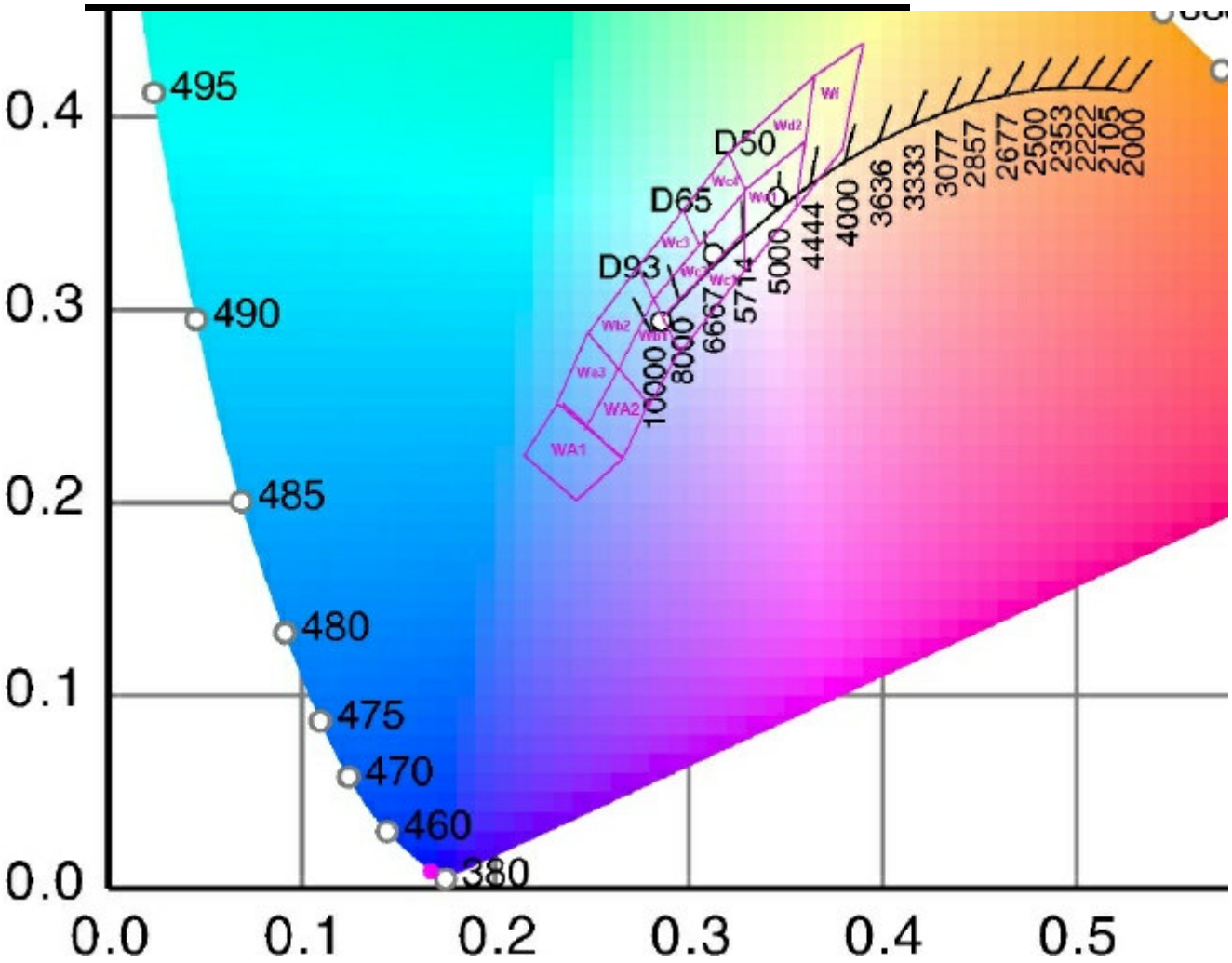
Parameter	Symbol	Test Condition	Value			Unit
			Min.	Typ.	Max.	
Forward Voltage	V_F	I_F = 50mA		V9~V12		
Reverse Current	I_R	V_R = 5V	----	----	30	μA
Color	λ_d	I_F = 50mA		WA~WD		
Spectral Line half-width	$\Delta\lambda$	I_F = 50mA		---		nm
Luminous Flux	I_V	I_F = 50mA		L,M		
Viewing Angle	$2\theta_{1/2}$	I_F = 50mA	35		40	Deg.

FLUX BIN FOR PIRANHA (UFO) LEDS

Bin Code	LM	Bin Code	LM	Bin Code	LM	Bin Code	LM
A	<=0.46	E	1.0-1.3	J	2.8-3.6	N	7.8-10.0
B	0.46-0.60	F	1.3-1.7	K	3.6-4.7	P	10-13
C	0.60-0.77	G	1.7-2.2	L	4.7-6.0	Q	13-17
D	0.77-1.0	H	2.2-2.8	M	6.0-7.8	R	17-22

FOR WHITE COLOR BINS SEE PAGE 3B

Placing of white color BINs on CIE table

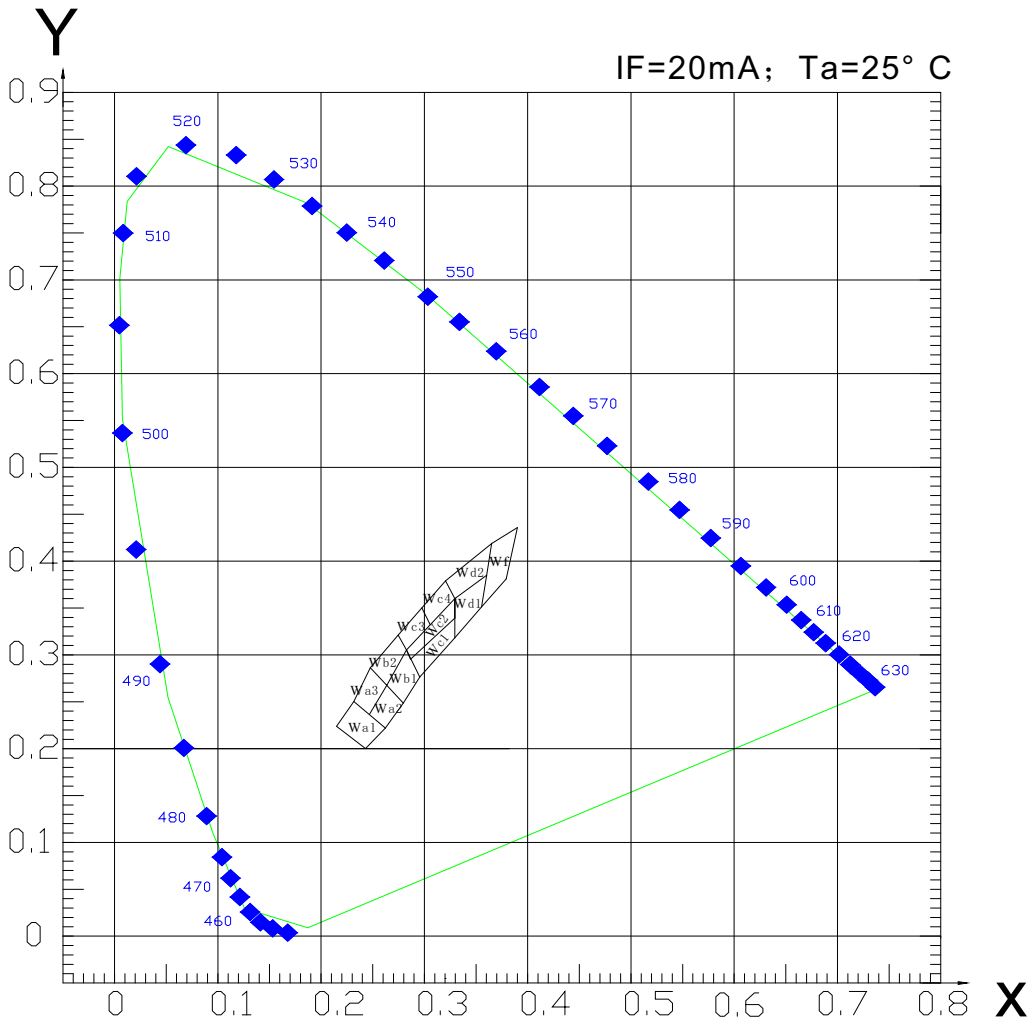


FORWARD VOLTAGE (VF) BIN

Bin Code	VF (V)	Bin Code	VF (V)	Bin Code	VF (V)	Bin Code	VF (V)
V1	1.6-1.8	V5	2.4-2.6	V9	3.2-3.4	V13	4.0-4.2
V2	1.8-2.0	V6	2.6-2.8	V10	3.4-3.6	V14	4.2-4.4
V3	2.0-2.2	V7	2.8-3.0	V11	3.6-3.8	V15	4.4-4.6
V4	2.2-2.4	V8	3.0-3.2	V12	3.8-4.0	V16	4.6-4.8

Chromaticity Coordinates Ranks (IF=20mA Ta=25℃)

Wa1	X	0.243	0.215	0.230	0.263	Wa2	X	0.263	0.246	0.264	0.280
	Y	0.200	0.230	0.250	0.220		Y	0.220	0.236	0.267	0.248
Wa3	X	0.246	0.230	0.248	0.264	Wb1	X	0.280	0.264	0.283	0.296
	Y	0.236	0.250	0.286	0.267		Y	0.248	0.267	0.305	0.276
Wb2	X	0.264	0.248	0.275	0.283	Wc1	X	0.296	0.287	0.330	0.330
	Y	0.267	0.286	0.321	0.305		Y	0.276	0.295	0.339	0.318
Wc2	X	0.287	0.283	0.330	0.330	Wc3	X	0.283	0.275	0.298	0.306
	Y	0.295	0.305	0.360	0.339		Y	0.305	0.321	0.350	0.332
Wc4	X	0.306	0.298	0.321	0.330	Wd1	X	0.330	0.330	0.361	0.356
	Y	0.332	0.350	0.379	0.360		Y	0.318	0.360	0.385	0.351
Wd2	X	0.330	0.321	0.366	0.361	Wf	X	0.356	0.366	0.391	0.380
	Y	0.360	0.379	0.419	0.385		Y	0.351	0.419	0.436	0.381



Typical electrical/optical characteristic curves：

