SPECIFICATION

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LT P/N Ý ÷ Á -

LT3014WH-E-Q

5 ' .J
Mass Product H Ý ÑC]

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1. Desc ription Ý ÷ 5

1.1 Ý ÷ F&

The White LED,which was fabricated by using a blue chip and the phosphor.

Product Package:3.0mmX1.4mmX0.7mm.

B Ý ÷ p,³ • / (' e+g; •8å(} %ö 9• •2¿ 6B˜ F Ý ÷ p . P P ; ;P P P P >

1.2Feature s Ý ÷(¯ ·

► PLCC Package.PLCC 7 >û

► Wide viewing angle. • @ Ü]

► Suitable for all SMT assembly and solder process.F8+^ Äv ?,º 6 0 7ú>û Â'@Û 8°

► Available on tape and reel.F8+^ ÄE³ \ -Eª

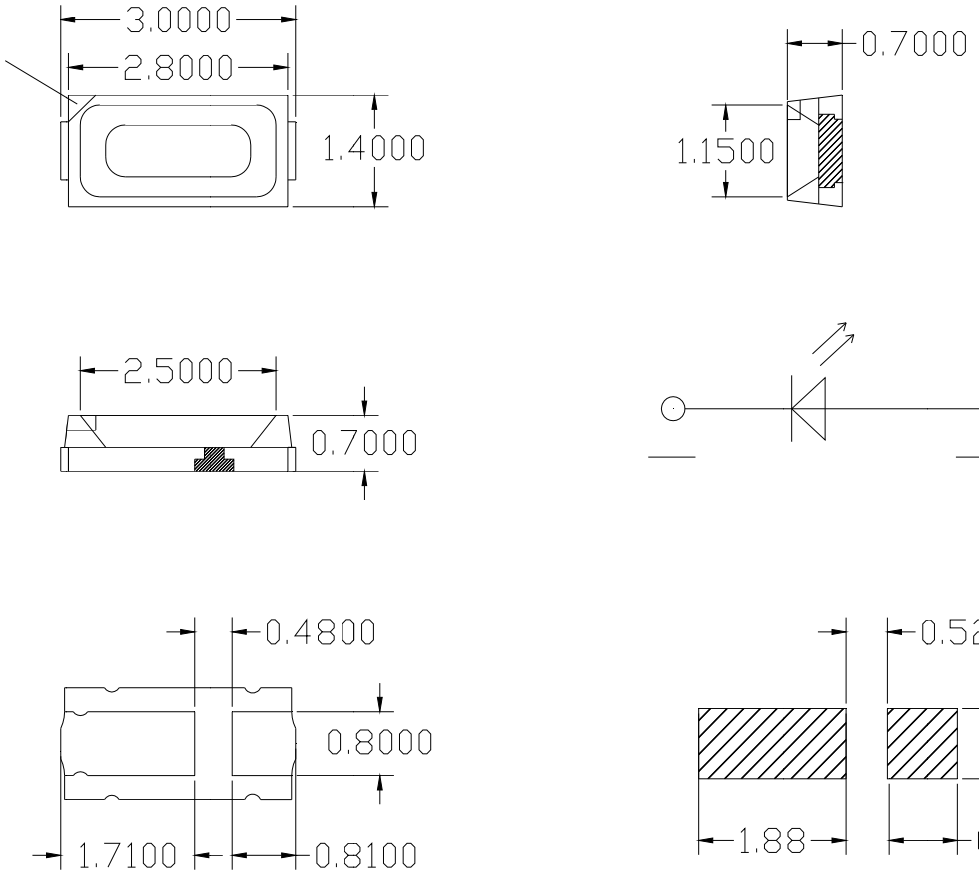
► Moisture sensitivity level: Level 3.Lh%¤1•4Ý ÍY H O

► RoHS compliant.% Cé 5x+ 6?·"x

1.3Applica tion Ý ÷ Ê+^

► LCD Back Light.LCD 7 •

1.4Packag e Dimen sion 7>ûp .



Recommended soliding pad

Notes =# Æ

All dimensions units are millimeters v ? p . =# ‹ ƒ p"!2©

All dimensions tolerances are ±0.1mm unless otherwise noted.Lš(‾ a =# L ¸ v ? p . ¢ $ p f "! 2©

1.5Produc t Param eters Ý ÷ ø ¦

Table 1-1 Electrical / Optical Characteristics at Ts=25°C +k] D • œ(¯]

Item N¯-$	Symbol 1\ -	Test Condition #•B —,	Value			Unit ‹ ƒ
			Min. ´ 6 E r µ	Typ. ´ ® Á r µ	Max. ´ 6] r µ	
Forward Voltage ´!™ G+k Á µ	V_F	IF=80mA	---	3.0	---	V
Reverse Current ´ G+k #w µ	I_R	V_R=5V	---	---	1	uA
Luminous Intensity ´ • p µ	Iv	IF=80mA	---	24	---	lm
Viewing Angle ´ •@ Ü µ	2θ1/2	IF=80mA	---	120	---	deg

Table 1-2 Absolute Maximum Ratings at Ts=25℃5 / 6] r

Parameter ´ ø ¦ µ	Symbol ´ 1\ - µ	Rating ´ r µ	Units ´ ‹ ƒ µ
Forward Current ´!™ G+k#w µ	I_F	120	mA
Peak Forward Current ´ & r +k#w µ	I_{FP}	150	mA
Reverse Voltage ´ G+k Á µ	V_R	5	V
Electrostatic Discharge (HBM) ´M•+k µ	E_{SD}	2000	V
LED Junction Temperature (LED)	Tj	105	
Operating Temperature ´ ' $_ Ü µ	T_{OPR}	-30 ~ + 85	
Storage Temperature ´ Þ Ž$_ Ü µ	T_{STG}	-40~+100	

Notes =# Æ

1. 1/10 Duty cycle, 0.1ms pulse width. 7? ó P V–0°"

2. The above forward voltage measurement allowance tolerance is –0.03V. @ v /p +k Á#•H B%$ –0.03V

3. The above color coordinates measurement allowance tolerance is –0.005. @ v /p † =#•H B% $–0.005

4. The above luminous intensity measurement allowance tolerance –3%. @F& • p Ü,º#•B wAî ¢ $ p –3%

5. Care is to be taken that power dissipation does not exceed the absolute maximum rating of the product. µ+^ Õ)½ C73CÆý?ú Ð,º 6] r >

6. All measurements were made under the standardized environment of LT. v ?#• B G3 e 0 Ä)è#Ñ)æ ?,º = ü#• B © & >

7.When the LEDs are in operation the maximum current should be decided after measuring the package temperature,junction temperature should not exceed the maximum rate / (' µ+^,º 6]+k#w M6º· o ¤ ™ '# — , .¤ Ð ¸5 $ C73C»Eý6] r >

1.6 Bin Range Of Forward Voltage and Luminous Intensity (IF=80mA)+k Á D • p < BIN 99* (IF=80mA)

Table 1-3 Bin Range Of Luminous Intensity • p < % L 99* ,) P$

BIN CODE	Min(lm)	Max(lm)
T20	20.00	22.00
T22	22.00	24.00
T24	24.00	26.00
T26	26.00	28.00
T28	28.00	30.00
T30	30.00	32.00
T32	32.00	34.00
T34	34.00	36.00
T36	36.00	38.00
T38	38.00	40.00
T40	40.00	42.00

Tabl

BIN CODE	
V0	
V1	
V2	
VV	
V	
V	
V	
V	

Notes =# Æ

VF Tolerance
IV Tolerance:

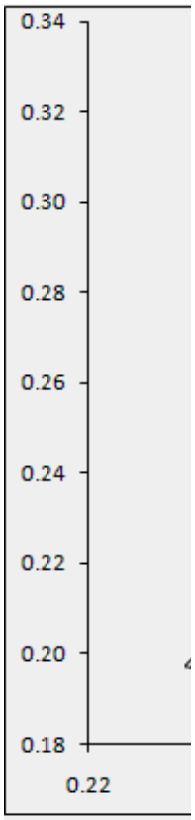


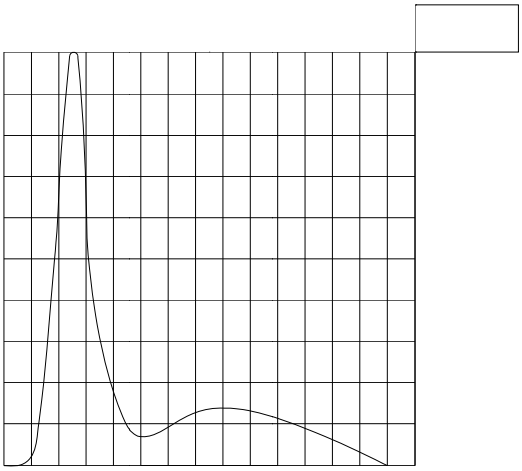
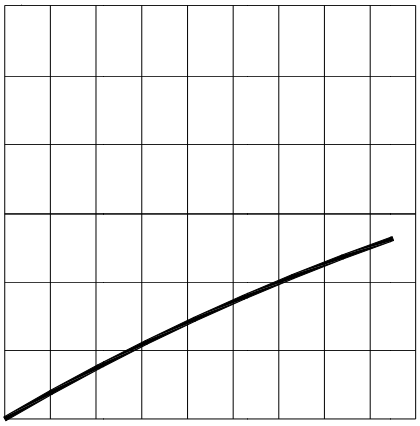
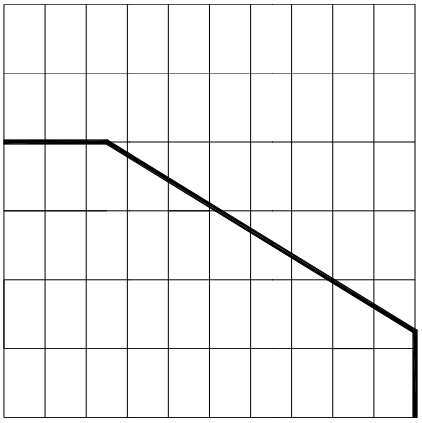
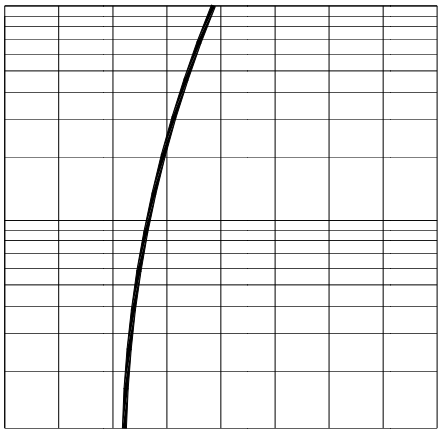
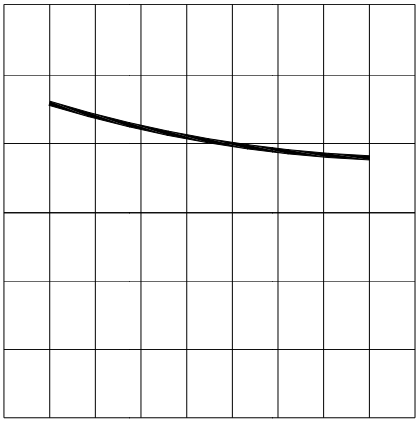
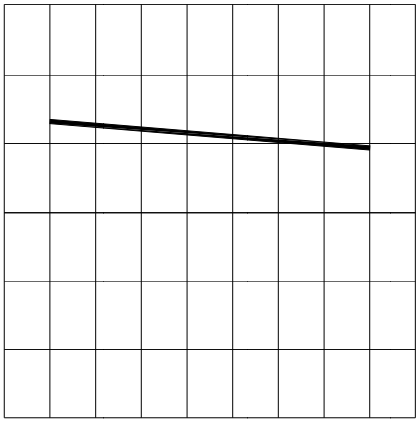
Table 1-4 The C.I.E Chromaticity Diagram CIE8¨ Ü 4

BIN CODE	CIE-X1	CIE-Y1	CIE-X2	CIE-Y2	CIE-X3	CIE-Y3	CIE-X4	CIE-Y4
H23	0.3138	0.3120	0.3071	0.3157	0.3116	0.3247	0.3183	0.3210
H22	0.3093	0.3030	0.3026	0.3067	0.3071	0.3157	0.3138	0.3120
H21	0.3048	0.294	0.2981	0.2977	0.3026	0.3067	0.3093	0.303
H20	0.3003	0.285	0.2936	0.2887	0.2981	0.2977	0.3048	0.294
H00	0.2958	0.276	0.2891	0.2797	0.2936	0.2887	0.3003	0.285
H01	0.2913	0.267	0.2846	0.2707	0.2891	0.2797	0.2958	0.276
H02	0.2868	0.258	0.2801	0.2617	0.2846	0.2707	0.2913	0.267
H03	0.2823	0.249	0.2756	0.2527	0.2801	0.2617	0.2868	0.258
H04	0.2778	0.24	0.2711	0.2437	0.2756	0.2527	0.2823	0.249
H05	0.2733	0.231	0.2666	0.2347	0.2711	0.2437	0.2778	0.24
H06	0.2688	0.222	0.2621	0.2257	0.2666	0.2347	0.2733	0.231
H07	0.2643	0.213	0.2576	0.2167	0.2621	0.2257	0.2688	0.222
H08	0.2598	0.204	0.2531	0.2077	0.2576	0.2167	0.2643	0.213
H09	0.2553	0.195	0.2486	0.1987	0.2531	0.2077	0.2598	0.204
H10	0.2508	0.186	0.2441	0.1897	0.2486	0.1987	0.2553	0.195
K23	0.3071	0.3157	0.3004	0.3194	0.3049	0.3284	0.3116	0.3247
K22	0.3026	0.3067	0.2959	0.3104	0.3004	0.3194	0.3071	0.3157
K21	0.2981	0.2977	0.2914	0.3014	0.2959	0.3104	0.3026	0.3067
K20	0.2936	0.2887	0.2869	0.2924	0.2914	0.3014	0.2981	0.2977
K00	0.2891	0.2797	0.2824	0.2834	0.2869	0.2924	0.2936	0.2887
K01	0.2846	0.2707	0.2779	0.2744	0.2824	0.2834	0.2891	0.2797
K02	0.2801	0.2617	0.2734	0.2654	0.2779	0.2744	0.2846	0.2707
K03	0.2756	0.2527	0.2689	0.2564	0.2734	0.2654	0.2801	0.2617
K04	0.2711	0.2437	0.2644	0.2474	0.2689	0.2564	0.2756	0.2527
K05	0.2666	0.2347	0.2599	0.2384	0.2644	0.2474	0.2711	0.2437
K06	0.2621	0.2257	0.2554	0.2294	0.2599	0.2384	0.2666	0.2347
K07	0.2576	0.2167	0.2509	0.2204	0.2554	0.2294	0.2621	0.2257
K08	0.2531	0.2077	0.2464	0.2114	0.2509	0.2204	0.2576	0.2167
K09	0.2486	0.1987	0.2419	0.2024	0.2464	0.2114	0.2531	0.2077
K10	0.2441	0.1897	0.2374	0.1934	0.2419	0.2024	0.2486	0.1987
T23	0.2937	0.3231	0.2982	0.3321	0.3049	0.3284	0.3004	0.3194
T22	0.2937	0.3231	0.2892	0.3141	0.2959	0.3104	0.3004	0.3194
T21	0.2914	0.3014	0.2847	0.3051	0.2892	0.3141	0.2959	0.3104
T20	0.2869	0.2924	0.2802	0.2961	0.2847	0.3051	0.2914	0.3014
T00	0.2824	0.2834	0.2757	0.2871	0.2802	0.2961	0.2869	0.2924
T01	0.2779	0.2744	0.2712	0.2781	0.2757	0.2871	0.2824	0.2834
T02	0.2734	0.2654	0.2667	0.2691	0.2712	0.2781	0.2779	0.2744
T03	0.2689	0.2564	0.2622	0.2601	0.2667	0.2691	0.2734	0.2654
T04	0.2644	0.2474	0.2577	0.2511	0.2622	0.2601	0.2689	0.2564
T05	0.2599	0.2384	0.2532	0.2421	0.2577	0.2511	0.2644	0.2474
T06	0.2554	0.2294	0.2487	0.2331	0.2532	0.2421	0.2599	0.2384

T07	0.2509	0.2204	0.2442	0.2241	0.2487	0.2331	0.2554
T08	0.2464	0.2114	0.2397	0.2151	0.2442	0.2241	0.2509
T09	0.2419	0.2024	0.2352	0.2061	0.2397	0.2151	0.2464
T10	0.2374	0.1934	0.2307	0.1971	0.2352	0.2061	0.2419
D23	0.3205	0.3083	0.3138	0.312	0.3183	0.321	0.325
D22	0.316	0.2993	0.3093	0.303	0.3138	0.312	0.3205
D21	0.3115	0.2903	0.3048	0.294	0.3093	0.303	0.316
D20	0.307	0.2813	0.3003	0.285	0.3048	0.294	0.3115
D00	0.3025	0.2723	0.2958	0.276	0.3003	0.285	0.307
D01	0.298	0.2633	0.2913	0.267	0.2958	0.276	0.3025
D02	0.2935	0.2543	0.2868	0.258	0.2913	0.267	0.298
D03	0.289	0.2453	0.2823	0.249	0.2868	0.258	0.2935
D04	0.2845	0.2363	0.2778	0.24	0.2823	0.249	0.289
D05	0.28	0.2273	0.2733	0.231	0.2778	0.24	0.2845
D06	0.2755	0.2183	0.2688	0.222	0.2733	0.231	0.28
D07	0.271	0.2093	0.2643	0.213	0.2688	0.222	
D08	0.2665	0.2003	0.2598	0.204	0.2643	0.213	
D09	0.262	0.1913	0.2553	0.195	0.2598	0.204	
D10	0.2575	0.1823	0.2508	0.186	0.2553	0.195	

Notes Æ

1 Measurement uncertainty of the color coordinates: ± 0.003. 8¨ = ü#•H C.¤ Ð Ü Æ

2 The new white dustbin refers to the application of small backlight standard. æ,³1ç e

1.7 Typical Optical Charact eristics Curves ®Á•œ(¯](4õ