

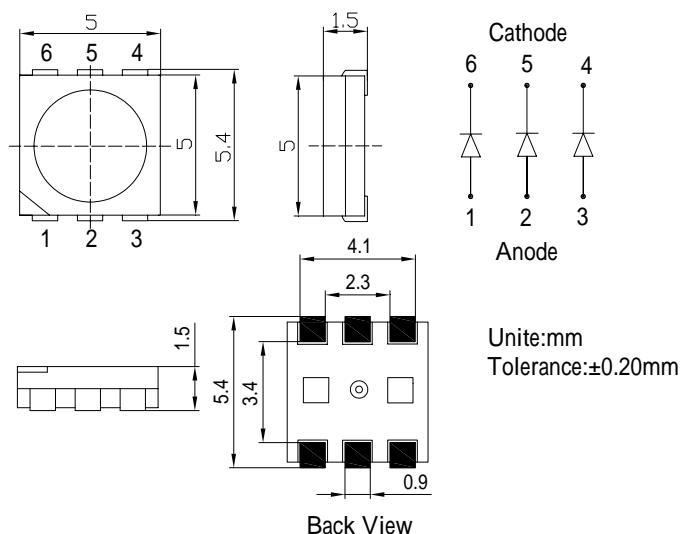
■Features

- High Luminous PLCC6 Top SMD LEDs
- 5.0x5.0x1.5mm Standard Directivity
- Long lifetime Operation
- Superior Weather-resistance
- Yellow Diffused Type

■Applications

- Backlighting (switches, keys, displays, illuminated advertising etc.)
- Substitution of Micro Incandescent Lamps
- Reading Lamps / Emergency Lighting
- Marker lights (e.g. steps, exit ways, etc.)
- Other Lighting

■Outline Dimension



■Absolute Maximum Rating (Ta=25 °C)

Item	Symbol	Value	Unit
DC Forward Current	I _F	80	mA
Pulse Forward Current*	I _{FP}	120	mA
Reverse Voltage	V _R	5	V
Power Dissipation	P _D	288	mW
Operating Temperature	T _{opr}	-30 ~ +85	
Storage Temperature	T _{stg}	-40 ~ +100	
Lead Soldering Temperature	T _{sol}	260 /5sec	-

*Pulse width Max.10ms Duty ratio max 1/10

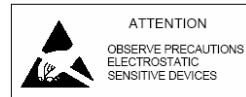
■Electrical -Optical Characteristics (Ta=25 °C)

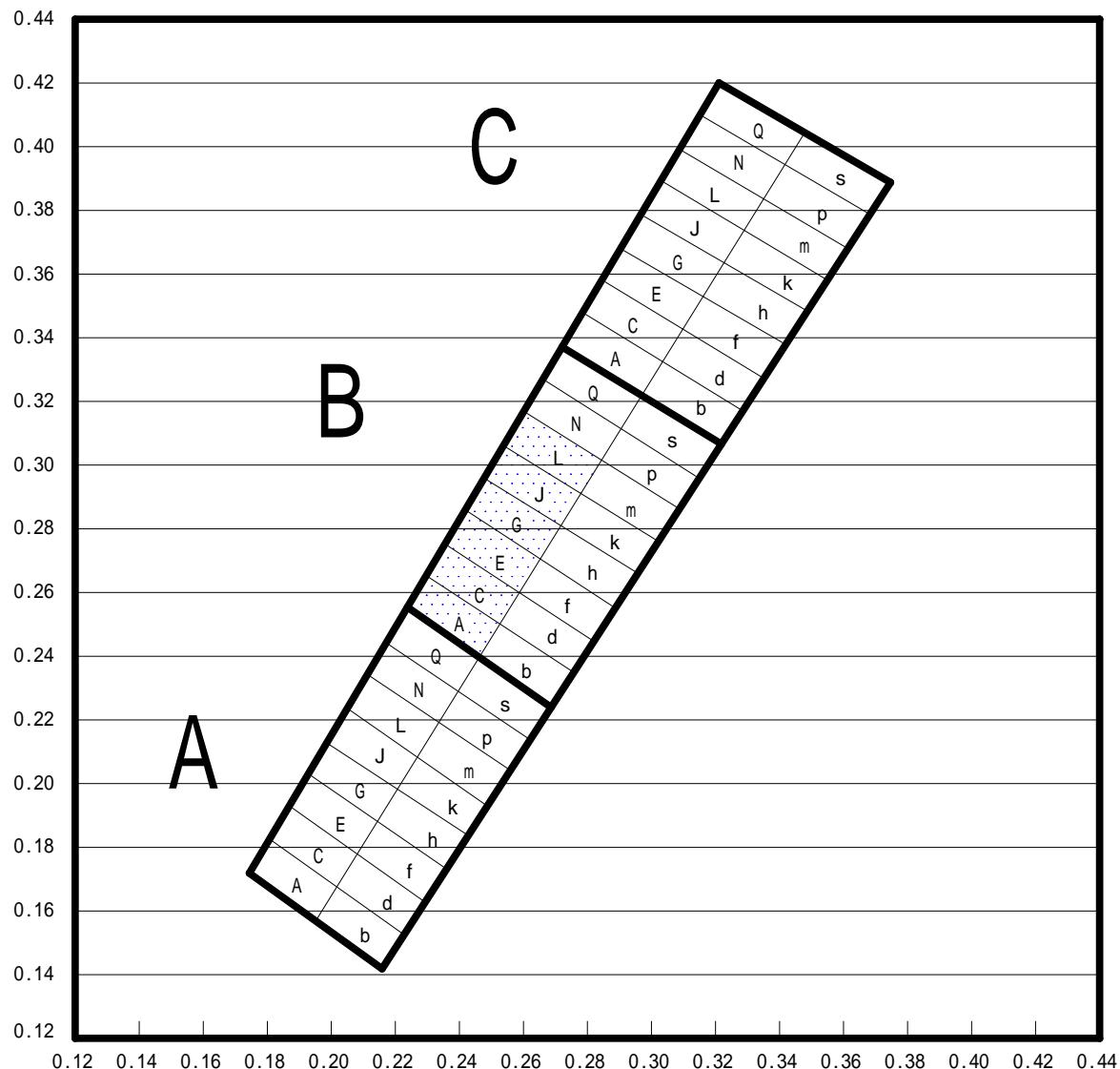
Part Number	Color	V _F (V)			I _R (μA)	Luminous Flux (lm)			CCT (K)	Chromaticity Coordinate		201/2(deg)	
		Min.	Typ.	Max.	Max.	Min.	Typ.	Max.	Typ.	X	Y	Typ.	
		I _F =60mA			V _R =5V	I _F =60mA							
OSW54TS4C1A	Cool white	W5	3.0	3.2	3.6	30	-	22	-	10000	0.27	0.28	120
OSW44TS4C1A	Pure white	W4	3.0	3.2	3.6	30	-	22	-	6500	0.31	0.33	120
OSMX4TS4C1A	Warm white		3.0	3.2	3.6	30	-	19	-	-	-	-	120

*1 Tolerance of chromaticity coordinate is ±10%

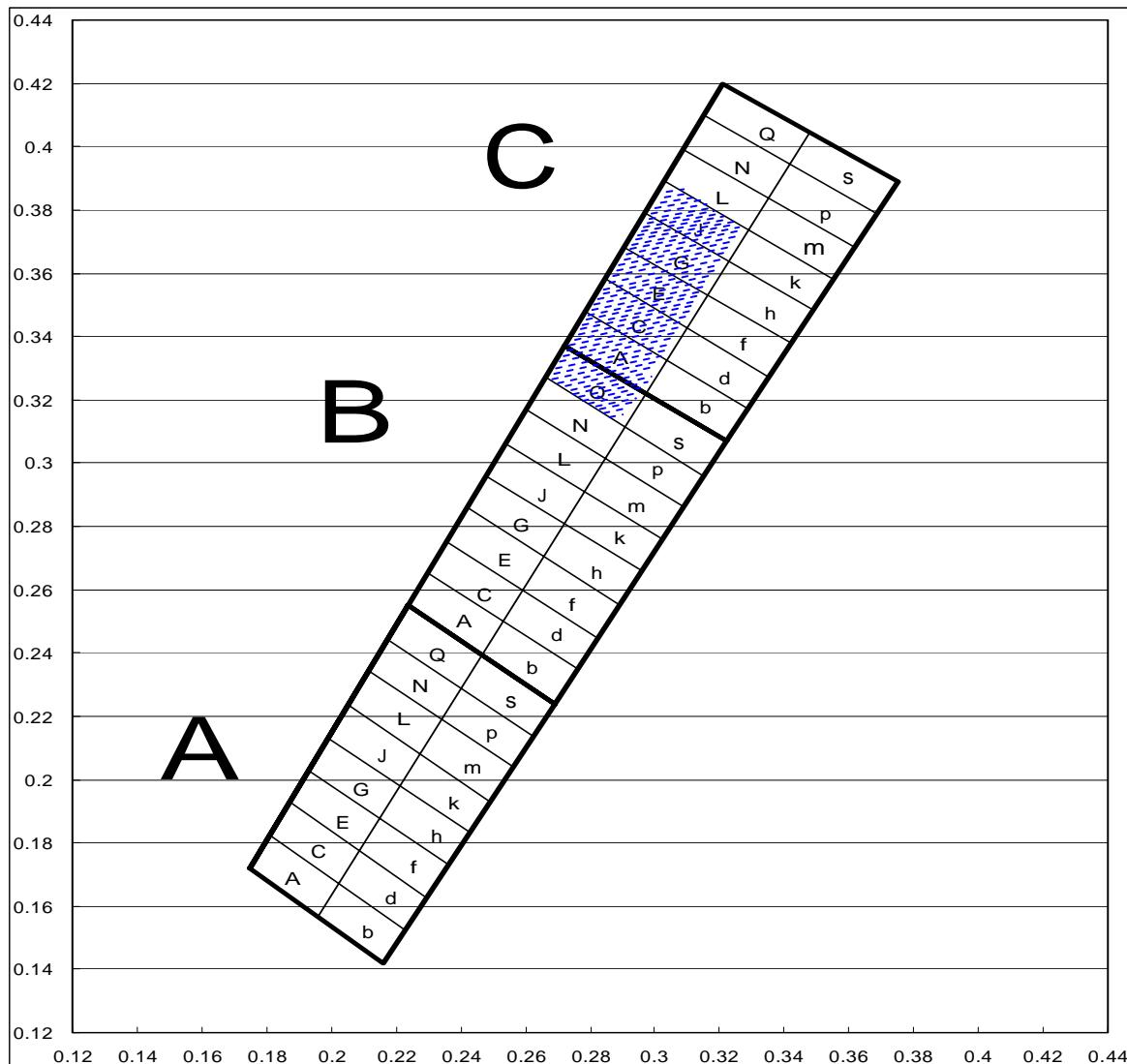
*2 Tolerance of luminous intensity is ±15%

LED & Application Technologies

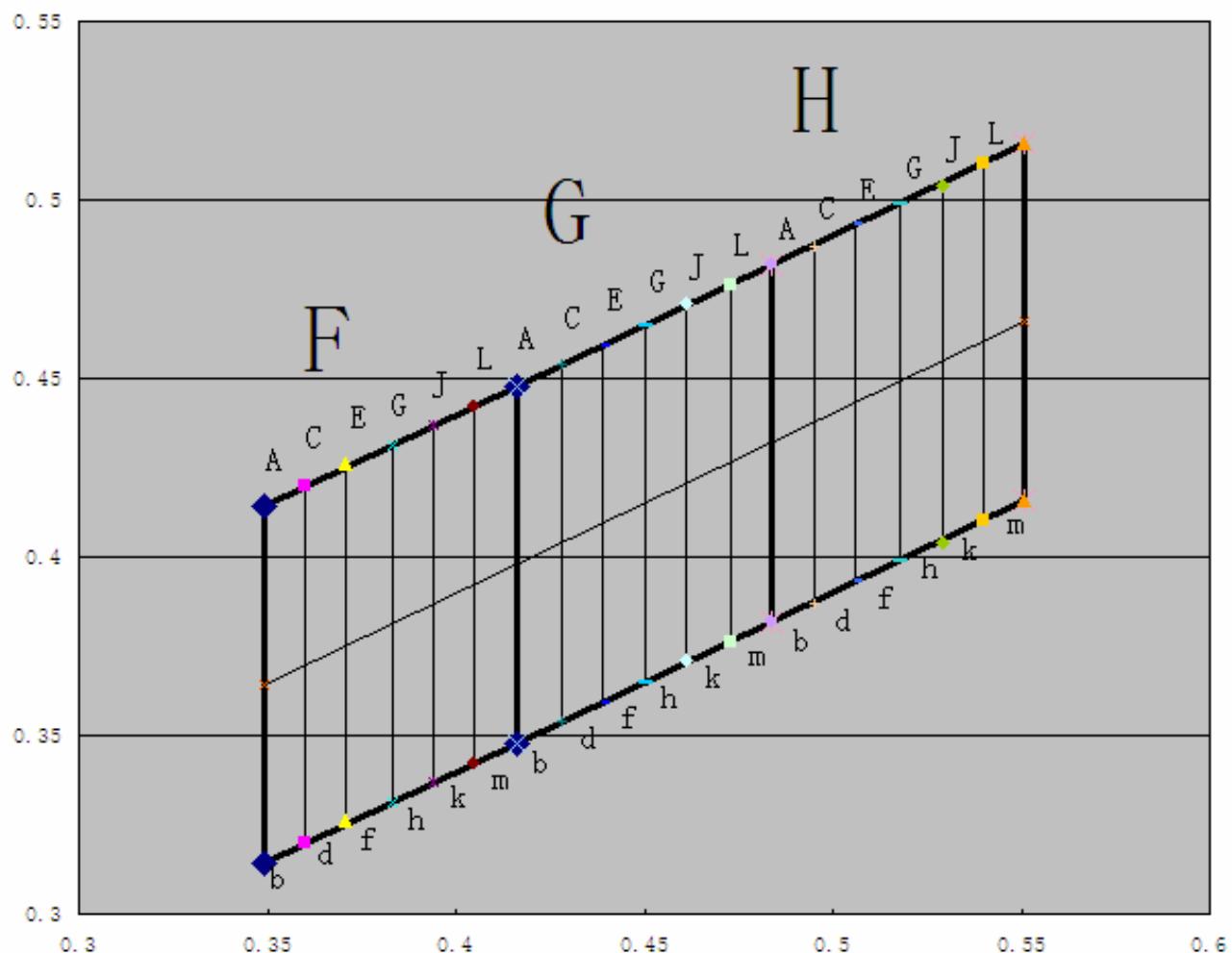


■ Color Rank For Cool White LED-- OSW54TS4C1A

■ Detail Color Bins Of The Type White LEDs

Bin	Top		Right		Bottom		Left		
	Code	X	Y	X	Y	X	Y	X	Y
BA	0.224	0.255		0.246	0.24	0.253	0.25	0.23	0.265
BC	0.23	0.265		0.253	0.25	0.259	0.26	0.236	0.275
BE	0.236	0.275		0.259	0.26	0.265	0.27	0.242	0.286
BG	0.242	0.286		0.265	0.27	0.272	0.281	0.248	0.296
BJ	0.248	0.296		0.272	0.281	0.278	0.291	0.254	0.306
BL	0.254	0.306		0.278	0.291	0.284	0.301	0.26	0.317

■ Color Rank For Pure White LED—OSW44TS4C1A

■ Detail Color Bins Of The Type White LEDs

Bin	Top		Right		Bottom		Left	
	Code	X	Y	X	Y	X	Y	X
BQ	0.266	0.327	0.291	0.312	0.297	0.322	0.272	0.337
CA	0.272	0.337	0.297	0.322	0.304	0.332	0.278	0.348
CC	0.278	0.348	0.304	0.332	0.31	0.343	0.285	0.358
CE	0.285	0.358	0.31	0.343	0.316	0.353	0.291	0.368
CG	0.291	0.368	0.316	0.353	0.323	0.363	0.297	0.379
CJ	0.297	0.379	0.323	0.363	0.329	0.374	0.303	0.389

■ Color Rank For Warm White LED—OSMX4TS4C1A


Detail Bins of F Part

Bin	Top	Top	Right	Right	Bottom	Bottom	Left	Left
Code	X	Y	X	Y	X	Y	X	Y
FA	0.349	0.414	0.349	0.364	0.36	0.37	0.36	0.42
Fb	0.349	0.364	0.349	0.314	0.36	0.32	0.36	0.37
FC	0.36	0.42	0.36	0.37	0.371	0.376	0.371	0.426
Fd	0.36	0.37	0.36	0.32	0.371	0.326	0.371	0.376
FE	0.371	0.426	0.371	0.376	0.383	0.381	0.383	0.431
Ff	0.371	0.376	0.371	0.326	0.383	0.331	0.383	0.381
FG	0.383	0.431	0.383	0.381	0.394	0.387	0.394	0.437
Fh	0.383	0.381	0.383	0.331	0.394	0.337	0.394	0.387
FJ	0.394	0.437	0.394	0.387	0.405	0.392	0.405	0.442
Fk	0.394	0.387	0.394	0.337	0.405	0.342	0.405	0.392
FL	0.405	0.442	0.405	0.392	0.416	0.398	0.416	0.448
Fm	0.405	0.392	0.405	0.342	0.416	0.348	0.416	0.398

Detail Bins of G Part

Bin	Top	Top	Right	Right	Bottom	Bottom	Left	Left
Code	X	Y	X	Y	X	Y	X	Y
GA	0.416	0.448	0.416	0.398	0.428	0.404	0.428	0.454
Gb	0.416	0.398	0.416	0.348	0.428	0.354	0.428	0.404
GC	0.428	0.454	0.428	0.404	0.439	0.409	0.439	0.459
Gd	0.428	0.404	0.428	0.354	0.439	0.359	0.439	0.409
GE	0.439	0.459	0.439	0.409	0.45	0.415	0.45	0.465
Gf	0.439	0.409	0.439	0.359	0.45	0.365	0.45	0.415
GG	0.45	0.465	0.45	0.415	0.461	0.421	0.461	0.471
Gh	0.45	0.415	0.45	0.365	0.461	0.371	0.461	0.421
GJ	0.461	0.471	0.461	0.421	0.473	0.426	0.473	0.476
Gk	0.461	0.421	0.461	0.371	0.473	0.376	0.473	0.426
GL	0.473	0.476	0.473	0.426	0.484	0.432	0.484	0.482
Gm	0.473	0.426	0.473	0.376	0.484	0.382	0.484	0.432

Detail Bins of H Part

Bin	Top	Top	Right	Right	Bottom	Bottom	Left	Left
Code	X	Y	X	Y	X	Y	X	Y
HA	0.484	0.482	0.484	0.432	0.495	0.437	0.495	0.487
Hb	0.484	0.432	0.484	0.382	0.495	0.387	0.495	0.437
HC	0.495	0.487	0.495	0.437	0.506	0.443	0.506	0.493
Hd	0.495	0.437	0.495	0.387	0.506	0.393	0.506	0.443
HE	0.506	0.493	0.506	0.443	0.518	0.449	0.518	0.499
Hf	0.506	0.443	0.506	0.393	0.518	0.399	0.518	0.449
HG	0.518	0.499	0.518	0.449	0.529	0.454	0.529	0.504
Hh	0.518	0.449	0.518	0.399	0.529	0.404	0.529	0.454
HJ	0.529	0.504	0.529	0.454	0.54	0.46	0.54	0.51
Hk	0.529	0.454	0.529	0.404	0.54	0.41	0.54	0.46
HL	0.54	0.51	0.54	0.46	0.551	0.466	0.551	0.516
Hm	0.54	0.46	0.54	0.41	0.551	0.416	0.551	0.466