

Legal and additional information

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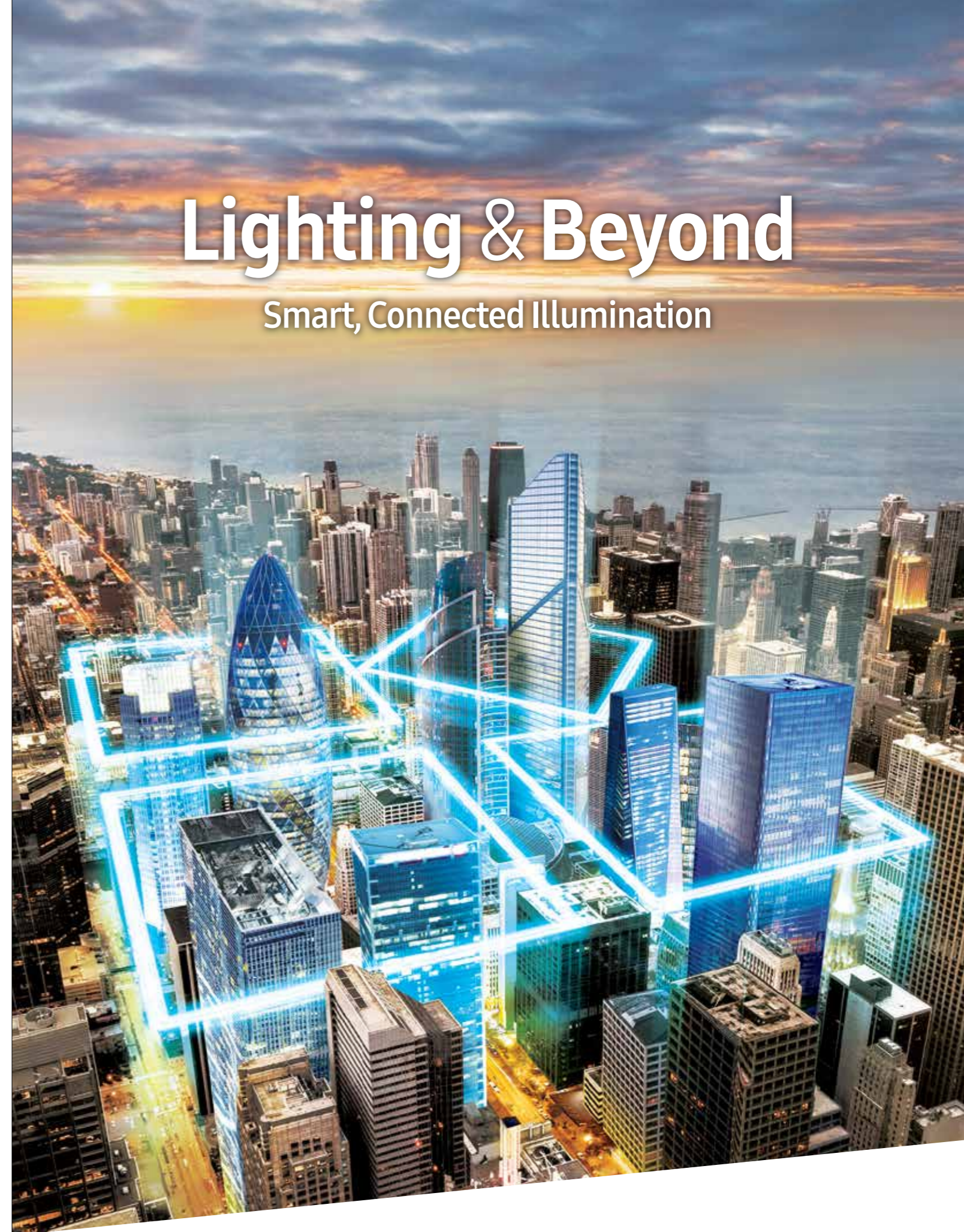
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SAMSUNG



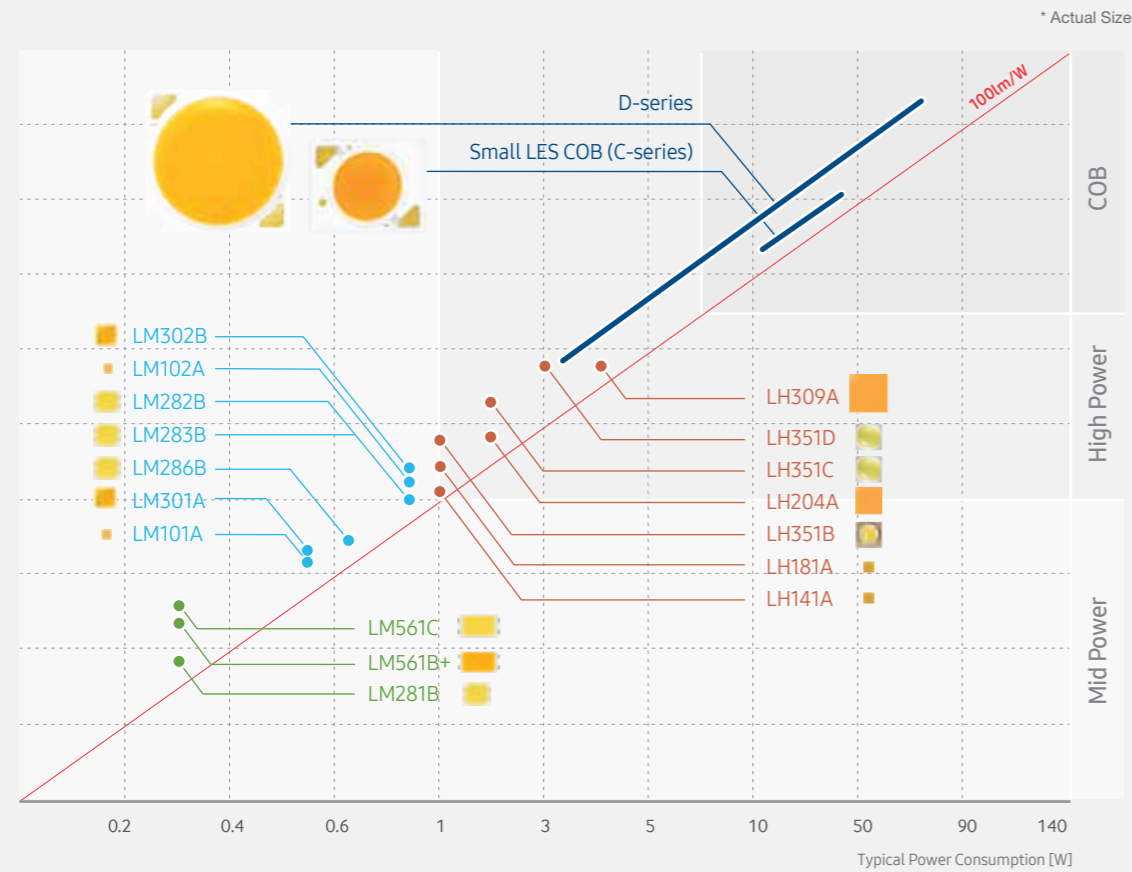
Lighting & Beyond

Smart, Connected Illumination

| Samsung LED Component

SAMSUNG

Samsung LED Line-up for illumination



Mid Power LED (0.3W)

- High efficacy
- Replacement for fluorescent lamps
- LED Tube, Ambient Light

High Power LED

- Ultra high flux
- Provides excellent color consistency
- Spotlight, Street Light

Mid Power LED (~1W)

- High flux & better lm/\$
- Replacement for incandescent lamps
- Retrofit Bulb, MR/PAR, Downlight

COB

- Chip on Board solution
- Outstanding color rendering & consistency
- Spotlight, High Bay & Low Bay Light

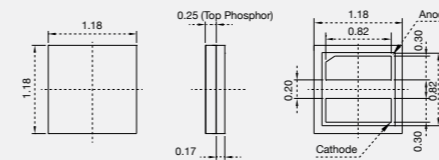
SAMSUNG

CSP

LM101A

Compact form factor for design flexibility

- 0.5W class mid power 3V LED
- Compact footprint: 1.18mm x 1.18mm



[150mA, 85°C]

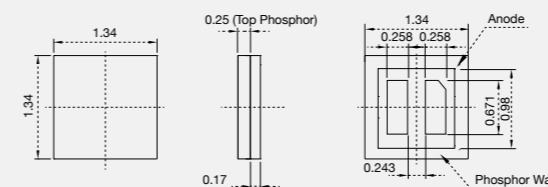
CRI	CCT (K)	Luminous Flux (lm)		IF (mA)	Part Number
		Min.	Max.		
70	3000	55	67	150	SCP7VT78HPL1V☆S06E
	3500	55	67		SCP7UT78HPL1U☆S06E
	4000	59	71		SCP7TT78HPL1T☆S06E
	5000	59	71		SCP7RT78HPL1R☆S06E
	5700	59	71		SCP7QT78HPL1Q☆S06E
	6500	59	71		SCP7PT78HPL1P☆S06E
80	2700	47	59	SCP8WT78HPL1W☆S06E	
	3000	51	63	SCP8VT78HPL1V☆S06E	
	3500	51	63	SCP8UT78HPL1U☆S06E	
	4000	55	67	SCP8TT78HPL1T☆S06E	
	5000	55	67	SCP8RT78HPL1R☆S06E	
	5700	51	63	SCP8QT78HPL1Q☆S06E	
90	6500	51	63	SCP8PT78HPL1P☆S06E	
	2700	35	47	SCP9WT78HPL1W☆S06E	
	3000	35	47	SCP9VT78HPL1V☆S06E	
	3500	39	51	SCP9UT78HPL1U☆S06E	

※ Bin option is available, please refer to data sheet for more details.
 ※ Note: "☆" can be "L" (Full bin for MacAdam 5-step), "K" (Kitting bin for MacAdam 3-step)

LM102A

Compact form factor for design flexibility

- 1W class mid power 6V LED
- Compact footprint: 1.34mm x 1.34mm



[150mA, 85°C]

CRI	CCT (K)	Luminous Flux (lm)		IF (mA)	Part Number
		Min.	Max.		
70	3000	103	119	150	SCS7VT93HPL2V☆S03F
	3500	103	119		SCS7UT93HPL2U☆S03F
	4000	111	127		SCS7TT93HPL2T☆S03F
	5000	111	127		SCS7RT93HPL2R☆S03F
	5700	111	127		SCS7QT93HPL2Q☆S03F
	6500	111	127		SCS7PT93HPL2P☆S03F
80	2700	95	111	SCS8WT93HPL2W☆S03F	
	3000	95	111	SCS8VT93HPL2V☆S03F	
	3500	103	119	SCS8UT93HPL2U☆S03F	
	4000	103	119	SCS8TT93HPL2T☆S03F	
	5000	111	127	SCS8RT93HPL2R☆S03F	
	5700	103	119	SCS8QT93HPL2Q☆S03F	
90	6500	103	119	SCS8PT93HPL2P☆S03F	
	2700	79	95	SCS9WT93HPL2W☆S03F	
	3000	79	95	SCS9VT93HPL2V☆S03F	
	3500	79	95	SCS9UT93HPL2U☆S03F	

※ Bin option is available, please refer to data sheet for more details.
 ※ Note: "☆" can be "L" (Full bin for MacAdam 5-step), "K" (Kitting bin for MacAdam 3-step)

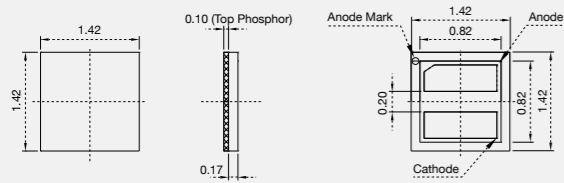
SAMSUNG

CSP

LM131A

Compact form factor for design flexibility

- 1W class mid power 3V LED
- Surface emitted LED (120° Beam angle)
- Compact footprint: 1.42mm x 1.42mm



[300mA, 25°C]

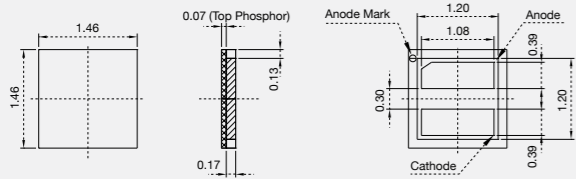
CRI Min.	CCT (K)	Luminous Flux (lm)		IF (mA)	Part Number
		Min.	Max.		
80	2700	82	106	300	SCS8WT78EFL1W08ECK
	3000	86	110		SCS8VT78EFL1V09FCK
	4000	94	118		SCS8TT78EFL1T0BHCK
	5000	98	122		SCS8RT78EFL1R0CICK
	6500	94	118		SCS8PT78EFL1P0BHCK

※ Bin option is available, please refer to data sheet for more details.

LH141A

Samsung flip chip provides optimized solution for torch / flash light

- 2W class high power LED
- Phosphor film directly attached to flip chip surface
- Plastic-free structure delivers low thermal resistance
- Compact footprint: 1.46mm x 1.46mm



[350mA, 25°C]

CRI Min.	CCT (K)	Luminous Flux (lm)		IF (mA)	Part Number
		Min.	Typ.		
68	5000	110	135	350	SCS6RTB6EFL1R0FZ6K
	6000	110	131		SCS6JTB6EFL1J0FZ6K
	7600	110	124		SCS6NTB6EFL1N0FZ6K

※ Bin option is available, please refer to data sheet for more details.

LH181A

Compact form factor for design flexibility

- 3W class high power CSP
- High performance and superior lm/\$
- Compact footprint: 1.9mm x 1.9mm



[350mA, 85°C]

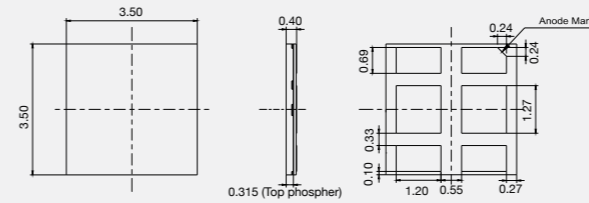
CRI Min.	CCT (K)	Luminous Flux (lm)		IF (mA)	Part Number
		Typ.	Max.		
70	2700	120	150	350	SCP7WTF1MPL1W0J34E
	3000	130	160		SCP7VTF1MPL1V0K34E
	3500	130	160		SCP7UTF1MPL1U0K34E
	4000	140	170		SCP7TTF1MPL1T0M34E
	5000	140	170		SCP7RTF1MPL1RTM34E
	5700	140	170		SCP7QTF1MPL1QTM34E
75	6500	140	170	350	SCP7PTF1MPL1PTM34E
	5000	130	160		SCPERTF1MPL1RTK34E
	5700	130	160		SCPEQTF1MPL1QTK34E
80	2700	120	150	350	SCP8WTF1MPL1W0J34E
	3000	130	160		SCP8VTF1MPL1V0K34E
	3500	130	160		SCP8UTF1MPL1U0K34E
	4000	130	160		SCP8TTF1MPL1T0K34E
	5000	130	160		SCP8RTF1MPL1RTK34E

※ Bin option is available, please refer to data sheet for more details.

LH204A

Designed for better lm/\$ & lm/W with Single LES

- ~4W Class high power LED
- High voltage CSP 2x2 Array providing 138lm/W, 240lm (150mA/11.6V)
- Footprint: 3.5mm x 3.5mm



[150mA, 85°C]

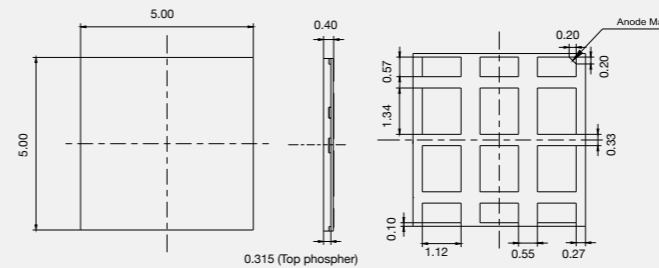
CRI Min.	CCT (K)	Luminous Flux (lm)		IF (mA)	Part Number
		Min.	Max.		
70	3000	215	260	150	SCA7VT78HAL4V0BG1F
	3500	215	260		SCA7UT78HAL4U0BG1F
	4000	215	260		SCA7TT78HAL4T0BG1F
	5000	230	280		SCA7RT78HAL4RTDH1F
80	5700	230	280	150	SCA7QT78HAL4QTDH1F
	6500	215	260		SCA7PT78HAL4PTBG1F
	2700	200	245		SCA8WT78HAL4W0AE1F
	3000	200	245		SCA8VT78HAL4V0AE1F
90	3500	200	245	150	SCA8UT78HAL4U0AE1F
	4000	215	260		SCA8TT78HAL4T0BG1F
	5000	215	260		SCA8RT78HAL4RTBG1F
	2700	165	200		SCA9WT78HAL4W06A1F
	3000	165	200		SCA9VT78HAL4V06A1F
	3500	175	215		SCA9UT78HAL4U07B1F
4000	175	215	SCA9TT78HAL4T07B1F		

※ Bin option is available, please refer to data sheet for more details.

LH309A

Designed for better lm/\$ & lm/W with Single LES

- ~7W Class high power LED
- High voltage CSP 3x3 Array providing 141lm/W, 550lm (150mA/26V)
- Footprint: 5.0mm x 5.0mm



[150mA, 85°C]

CRI Min.	CCT (K)	Luminous Flux (lm)		IF (mA)	Part Number
		Min.	Max.		
70	3000	475	585	150	SCA7VT78HAL9V08FEP
	3500	510	625		SCA7UT78HAL9U0AJEP
	4000	510	625		SCA7TT78HAL9T0AJEP
	5000	510	625		SCA7RT78HAL9RTAJEP
	5700	510	625		SCA7QT78HAL9QTAJEP
	6500	510	625		SCA7PT78HAL9PTAJEP
80	2700	445	545	150	SCA8WT78HAL9W06DEP
	3000	445	545		SCA8VT78HAL9V06DEP
	3500	475	585		SCA8UT78HAL9U08FEP
	4000	475	585		SCA8TT78HAL9T08FEP
90	5000	510	625	150	SCA8RT78HAL9RTAJEP
	2700	365	445		SCA9WT78HAL9W006EP
	3000	390	475		SCA9VT78HAL9V028EP
	3500	390	475		SCA9UT78HAL9U028EP
4000	390	475	SCA9TT78HAL9T028EP		

※ Bin option is available, please refer to data sheet for more details.

Mid Power LEDs

LM281B



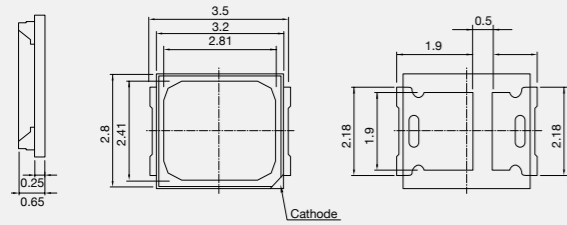
[150mA, 25°C]

Designed for better lm/\$

- Suitable for ambient lightings, downlights & lamps
- Standard footprint: 2.8mm x 3.5mm

CRI Min.	CCT (K)	Luminous Flux (lm)		IF (mA)	Part Number
		Min.	Max.		
80	2700	53.3	65.3	150	SPMWH1228FD5WAW0S3
	3000	54.3	66.3		SPMWH1228FD5WAV0S3
	3500	55.3	67.3		SPMWH1228FD5WAW0S3
80	4000	57.3	69.3	150	SPMWH1228FD5WAT0S3
	5000	59.3	71.3		SPMWH1228FD5WAR0S3
	5700	58.3	70.3		SPMWH1228FD5WAQ0S3
	6500	57.3	69.3		SPMWH1228FD5WAP0S3

※ Bin option is available, please refer to data sheet for more details.



LM282B



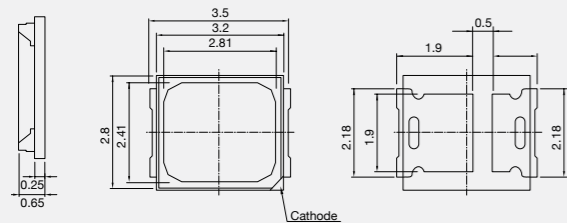
[100mA, 25°C]

Designed for better lm/\$

- 0.5W class mid power LED (6V)
- Suitable for downlights, ambient lightings & lamps
- Standard footprint: 2.8mm x 3.5mm

CRI Min.	CCT (K)	Luminous Flux (lm)		IF (mA)	Part Number
		Min.	Max.		
80	2700	98	108	150	SPMWH1221FD5GBW0SA
	3000	100	110		SPMWH1221FD5GBV0SA
	3500	103	113		SPMWH1221FD5GBU0SA
80	4000	105	115	150	SPMWH1221FD5GBT0SA
	5000	110	120		SPMWH1221FD5GBR0SA
	5700	108	118		SPMWH1221FD5GBQ0SA
	6500	105	115		SPMWH1221FD5GBP0SA

※ Bin option is available, please refer to data sheet for more details.



LM283B



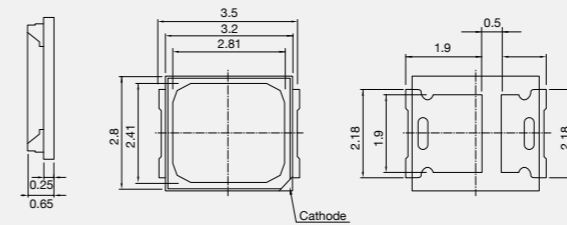
[100mA, 25°C]

Designed for better lm/\$

- 0.5W class mid power LED (9V)
- Suitable for lamps & downlights
- Standard footprint: 2.8mm x 3.5mm

CRI Min.	CCT (K)	Luminous Flux (lm)		IF (mA)	Part Number
		Min.	Max.		
80	2700	98	118	100	SPMWH1229AD5SGW0SA
	3000	100	120		SPMWH1229AD5SGV0SA
	3500	103	123		SPMWH1229AD5SGU0SA
80	4000	105	125	100	SPMWH1229AD5SGT0SA
	5000	110	130		SPMWH1229AD5SGR0SA
	5700	108	128		SPMWH1229AD5SGQ0SA
	6500	105	125		SPMWH1229AD5SGP0SA

※ Bin option is available, please refer to data sheet for more details.



LM286B



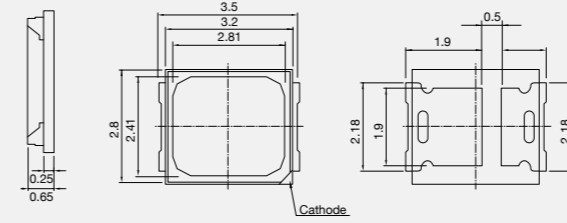
[100mA, 25°C]

Designed for better lm/\$

- 0.5W class mid power LED (18V)
- Suitable for lamps & downlights
- Standard footprint: 2.8mm x 3.5mm

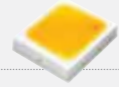
CRI Min.	CCT (K)	Luminous Flux (lm)		IF (mA)	Part Number
		Min.	Max.		
80	2700	80	90	40	SPMWH12244D5W8W0SA
	3000	85	95		SPMWH12244D5W8V0SA
	3500	90	100		SPMWH12244D5W8U0SA
80	4000	95	105	40	SPMWH12244D5W8T0SA
	5000	95	105		SPMWH12244D5W8R0SA
	5700	95	105		SPMWH12244D5W8Q0SA
	6500	92	102		SPMWH12244D5W8P0SA

※ Bin option is available, please refer to data sheet for more details.



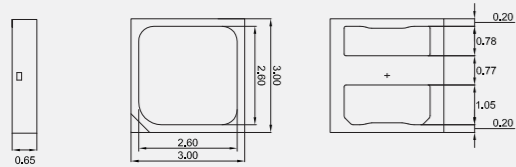
Mid Power LEDs

LM301A



Designed for best lm/\$

- Mid-high power LED
- EMC resin for high reliability
- Suitable for high bay lightings & downlights
- Standard footprint: 3.0mm x 3.0mm

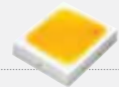


[150mA, 85°C]

CRI Min.	CCT (K)	Luminous Flux (lm)		IF (mA)	Part Number
		Min.	Max.		
90	2700	38	46	150	SPMWHT328FD7WAW0S0
	3000	38	46		SPMWHT328FD7WAV0S0
	3500	38	46		SPMWHT328FD7WAU0S0
	4000	42	50		SPMWHT328FD7WAT0S0
	5000	42	50		SPMWHT328FD7WAR0S0
	5700	42	50		SPMWHT328FD7WAQ0S0
80	2700	50	58	SPMWHT328FD5WAW0S0	
	3000	54	62	SPMWHT328FD5WAV0S0	
	3500	58	66	SPMWHT328FD5WAU0S0	
	4000	58	66	SPMWHT328FD5WAT0S0	
	5000	58	66	SPMWHT328FD5WAR0S0	
	5700	58	66	SPMWHT328FD5WAQ0S0	
70	2700	58	66	SPMWHT328FD3WAW0S0	
	3000	58	66	SPMWHT328FD3WAV0S0	
	3500	58	66	SPMWHT328FD3WAU0S0	
	4000	62	70	SPMWHT328FD3WAT0S0	
	5000	62	70	SPMWHT328FD3WAR0S0	
	5700	62	70	SPMWHT328FD3WAQ0S0	

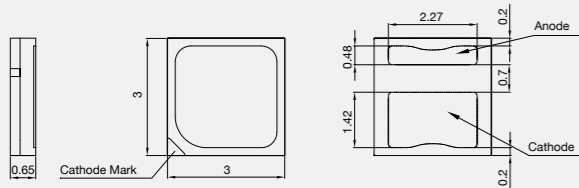
* Bin option is available, please refer to data sheet for more details.

LM302A



Designed for best lm/\$

- 1W class mid-high power LED (6V)
- EMC resin for high reliability
- Suitable for lamps & downlights
- Standard footprint: 3.0mm x 3.0mm

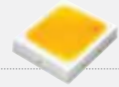


[150mA, 25°C]

CRI Min.	CCT (K)	Luminous Flux (lm)		IF (mA)	Part Number
		Min.	Max.		
90	2700	80	96	150	SPMWHT327FD7GBW0S0
	3000	85	101		SPMWHT327FD7GBV0S0
	3500	87	103		SPMWHT327FD7GBU0S0
	4000	89	105		SPMWHT327FD7GBT0S0
	5000	87	103		SPMWHT327FD7GBR0S0
	5700	85	101		SPMWHT327FD7GBQ0S0
80	2700	102	126	SPMWHT327FD5GBW0S0	
	3000	104	128	SPMWHT327FD5GBV0S0	
	3500	107	131	SPMWHT327FD5GBU0S0	
	4000	109	133	SPMWHT327FD5GBT0S0	
	5000	113	137	SPMWHT327FD5GBR0S0	
	5700	111	135	SPMWHT327FD5GBQ0S0	
70	2700	109	133	SPMWHT327FD3GBV0S0	
	3000	112	136	SPMWHT327FD3GBU0S0	
	4000	117	143	SPMWHT327FD3GBT0S0	
	5000	121	147	SPMWHT327FD3GBR0S0	
	5700	119	145	SPMWHT327FD3GBQ0S0	
	5700	119	135	SPMWHT327FD3GBQ0S0	

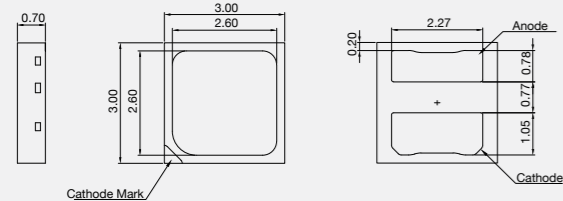
* Bin option is available, please refer to data sheet for more details.

LM302B



Designed for best lm/\$

- Superior mid power LED with wide over-drive range up to 1.5W
- Mold resin for high reliability
- Suitable for high/low bay lightings & downlights
- Standard footprint: 3.0mm x 3.0mm



[150mA, 85°C]

CRI Min.	CCT (K)	Luminous Flux (lm)		IF (mA)	Part Number
		Min.	Max.		
90	2700	70	88	150	SPMWHT329FD7YBW0S0
	3000	70	88		SPMWHT329FD7YBV0S0
	3500	79	97		SPMWHT329FD7YBU0S0
	4000	79	97		SPMWHT329FD7YBT0S0
	5000	79	97		SPMWHT329FD7YBR0S0
	5700	79	97		SPMWHT329FD7YBQ0S0
80	2700	97	115	SPMWHT329FD5YBW0S0	
	3000	97	115	SPMWHT329FD5YBV0S0	
	3500	106	124	SPMWHT329FD5YBU0S0	
	4000	115	133	SPMWHT329FD5YBT0S0	
	5000	115	133	SPMWHT329FD5YBR0S0	
	5700	115	133	SPMWHT329FD5YBQ0S0	
70	2700	115	133	SPMWHT329FD3YBW0S0	
	3000	106	124	SPMWHT329FD3YBV0S0	
	3500	106	124	SPMWHT329FD3YBU0S0	
	4000	115	133	SPMWHT329FD3YBT0S0	
	5000	115	133	SPMWHT329FD3YBR0S0	
	5700	115	133	SPMWHT329FD3YBQ0S0	

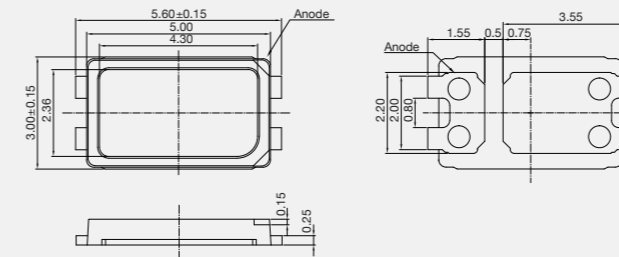
* Bin option is available, please refer to data sheet for more details.

LM561B Plus



Improved efficacy and performance of LM561B to provide better solutions

- 0.3W class mid power LED
- High efficacy for distributed light
- Standard footprint: 5.6mm x 3.0mm



[65mA, 25°C]

CRI Min.	CCT (K)	Luminous Flux (lm)		IF (mA)	Part Number
		Min.	Max.		
90	2700	22	28	65	SPMWHT541MP7WAW0S0
	3000	22.5	28.5		SPMWHT541MP7WAV0S0
	3500	23	29		SPMWHT541MP7WAU0S0
	4000	24	30		SPMWHT541MP7WAT0S0
	5000	25	31		SPMWHT541MP7WAR0S0
	5700	24.5	30.5		SPMWHT541MP7WAQ0S0
80	2700	30	34	65	SPMWHT541MP5WAW0S0
	3000	30.5	34.5		SPMWHT541MP5WAV0S0
	3500	31	35		SPMWHT541MP5WAU0S0
	4000	32	36		SPMWHT541MP5WAT0S0
	5000	33	37		SPMWHT541MP5WAR0S0
	5700	32.5	36.5		SPMWHT541MP5WAQ0S0
80 MacAdam 3 step	2700	30	34	65	SPMWHT541MP5WAW0S0
	3000	30.5	34.5		SPMWHT541MP5WAV0S0
	3500	31	35		SPMWHT541MP5WAU0S0
	4000	32	36		SPMWHT541MP5WAT0S0
	5000	33	37		SPMWHT541MP5WAR0S0
	5700	32.5	36.5		SPMWHT541MP5WAQ0S0
70	2700	30	34	65	SPMWHT541MP3WAW0S0
	3000	30.5	34.5		SPMWHT541MP3WAV0S0
	3500	31	35		SPMWHT541MP3WAU0S0
	4000	32	36		SPMWHT541MP3WAT0S0
	5000	33	37		SPMWHT541MP3WAR0S0
	5700	32.5	36.5		SPMWHT541MP3WAQ0S0

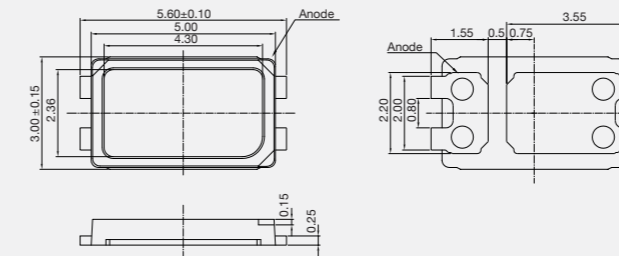
* Bin option is available, please refer to data sheet for more details.

LM561C



Highest performance, highest lm/W for fluorescent lamp replacement

- 0.3W class mid power LED
- Highest efficacy: 205lm/W @ 65mA, 5000K, 80CRI
- Standard footprint: 5.6mm x 3.0mm



[65mA, 25°C]

CRI Min.	CCT (K)	Luminous Flux (lm)		IF (mA)	Part Number
		Min.	Max.		
90	2700	24	30	65	SPMWHT541ML7XAW0S0
	3000	24.5	30.5		SPMWHT541ML7XAV0S0
	3500	25	31		SPMWHT541ML7XAU0S0
	4000	26	32		SPMWHT541ML7XAT0S0
	5000	27	31		SPMWHT541ML7XAR0S0
	5700	26.5	30.5		SPMWHT541ML7XAQ0S0
80	2700	30	34	65	SPMWHT541ML5XAW0S0
	3000	30.5	34.5		SPMWHT541ML5XAV0S0
	3500	31	35		SPMWHT541ML5XAU0S0
	4000	32	36		SPMWHT541ML5XAT0S0
	5000	33	37		SPMWHT541ML5XAR0S0
	5700	32.5	36.5		SPMWHT541ML5XAQ0S0
70	2700	30	34	65	SPMWHT541ML3XAW0S0
	3000	30.5	34.5		SPMWHT541ML3XAV0S0
	3500	31	35		SPMWHT541ML3XAU0S0
	4000	32	36		SPMWHT541ML3XAT0S0
	5000	33	37		SPMWHT541ML3XAR0S0
	5700	32.5	36.5		SPMWHT541ML3XAQ0S0

* Bin option is available, please refer to data sheet for more details.

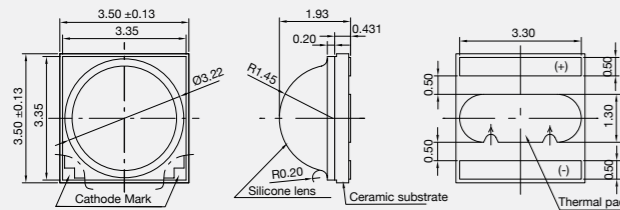
High Power LEDs

LH351B



High performance for outdoor and directional lighting applications

- Operates at a maximum current of up to 1.5A
- High efficacy outdoor solution
(Delivering set efficacy over 110lm/W @700mA)
- Excellent efficacy: 172lm/W @ 350mA, 85°C 5000K
- LM80 Certified @ 1A, 105°C (Ts) (L70>60,000 @1A)
- Footprint: 3.5mm x 3.5mm

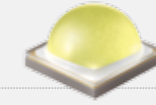


[350mA, 85°C]

CRI Min.	CCT (K)	Luminous Flux (lm)		IF (mA)	Part Number	
		Min.	Max.			
90	2700	90	120	350	SPHWH2L3D30GD4W0F3	
	3000	90	120		SPHWH2L3D30GD4V0F3	
	3500	100	130		SPHWH2L3D30GD4U0G3	
		110	140		SPHWH2L3D30GD4U0H3	
	2700	110	140		SPHWH2L3D30ED4W0H3	
		120	150		SPHWH2L3D30ED4W0J3	
3000	110	140	350	SPHWH2L3D30ED4V0H3		
	120	150		SPHWH2L3D30ED4V0J3		
	130	160		SPHWH2L3D30ED4V0K3		
	3500	120		150	SPHWH2L3D30ED4U0J3	
		130		160	SPHWH2L3D30ED4U0K3	
	4000	120		150	350	SPHWH2L3D30ED4T0J3
130		160	SPHWH2L3D30ED4T0K3			
140		170	SPHWH2L3D30ED4T0M3			
5000		130	160	SPHWH2L3D30ED4RTK3		
		140	170	SPHWH2L3D30ED4RTM3		
5700		130	160	350		SPHWH2L3D30ED4QTK3
	140	170	SPHWH2L3D30ED4QTM3			
	6000	130	160		SPHWH2L3D30ED4PQK3	
		140	170		SPHWH2L3D30ED4PQM3	
	6500	130	160		350	SPHWH2L3D30ED4PTK3
		140	170			SPHWH2L3D30ED4PTM3
140		170	SPHWH1L3D30DD4RTM3			
5000		150	180	SPHWH1L3D30DD4RTN3		
		160	190	SPHWH1L3D30DD4RTP3		
75		140	170	350		SPHWH1L3D30DD4QTM3
	5700	150	180		SPHWH1L3D30DD4QTN3	
		160	190		SPHWH1L3D30DD4QTP3	
	3000	130	160		SPHWH2L3D30CD4V0K3	
		140	170		SPHWH2L3D30CD4V0M3	
	3500	140	170		350	SPHWH2L3D30CD4V0N3
130		160	SPHWH2L3D30CD4U0K3			
140		170	SPHWH2L3D30CD4U0M3			
4000		140	170	SPHWH2L3D30CD4T0M3		
		150	180	SPHWH2L3D30CD4T0N3		
70		160	190	350		SPHWH2L3D30CD4T0P3
	140	170	SPHWH2L3D30CD4RTM3			
	150	180	SPHWH2L3D30CD4RTN3			
	5000	160	170		SPHWH2L3D30CD4RTP3	
		140	170		SPHWH2L3D30CD4QTM3	
	5700	150	180		350	SPHWH2L3D30CD4QTN3
160		190	SPHWH2L3D30CD4QTP3			
6500		140	170	SPHWH2L3D30CD4PTM3		
		150	180	SPHWH2L3D30CD4PTN3		

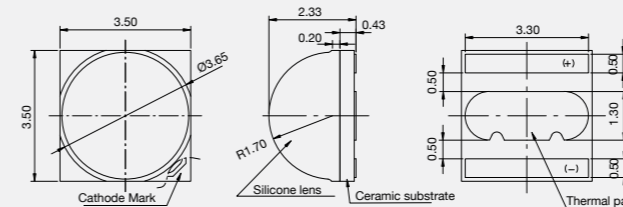
※ Bin option is available, please refer to data sheet for more details.

LH351C



High performance for outdoor and directional lighting applications

- Operates at a maximum current of up to 2.0A
- High efficacy outdoor solution
(Delivering set efficacy over 120lm/W @700mA)
- Excellent efficacy: 160lm/W @700mA, 85°C 5000K
- Footprint: 3.5mm x 3.5mm

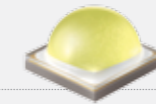


[700mA, 85°C]

CRI Min.	CCT (K)	Luminous Flux (lm)		IF (mA)	Part Number
		Min.	Max.		
90	3000	180	240	700	SPHWHTL3D50GE4V0F6
	3000	240	300		SPHWHTL3D50EE4V0J6
80	4000	240	300	700	SPHWHTL3D50EE4T0J6
	5000	260	320		SPHWHTL3D50EE4RTK6
	5700	260	320		SPHWHTL3D50EE4QTK6
75	5700	280	340	700	SPHWHTL3D50DE4QTK6
	4000	280	340		SPHWHTL3D50CE4T0M6
70	5000	280	340	700	SPHWHTL3D50CE4RTM6
	5700	280	340		SPHWHTL3D50CE4QTM6

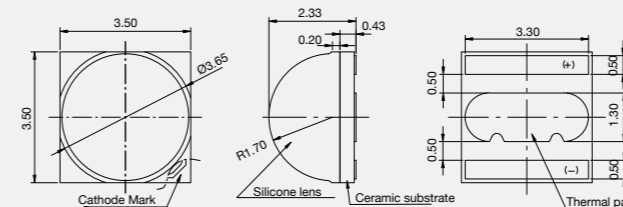
※ Bin option is available, please refer to data sheet for more details.

LH351D



High performance for outdoor and directional lighting applications

- Operates at a maximum current of up to 3.0A
- High efficacy outdoor solution
(Delivering set efficacy over 120lm/W @1,050mA)
- Excellent efficacy: 155lm/W @1,050mA, 85°C 5000K
- Footprint: 3.5mm x 3.5mm



[1,050mA, 85°C]

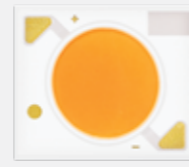
CRI Min.	CCT (K)	Luminous Flux (lm)		IF (mA)	Part Number
		Min.	Max.		
90	3000	280	340	1,050	SPHWHTL3DA0GF4V0M6
	5700	360	420		SPHWHTL3DA0GF4QTR6
	3000	360	420		SPHWHTL3DA0EF4V0R6
80	4000	360	420	1,050	SPHWHTL3DA0EF4T0R6
	5000	380	440		SPHWHTL3DA0EF4RTS6
	5700	400	460		SPHWHTL3DA0EF4QTT6
75	5700	400	460	1,050	SPHWHTL3DA0DF4QTT6
	4000	400	460		SPHWHTL3DA0CF4T0T6
70	5000	420	480	1,050	SPHWHTL3DA0CF4RTU6
	5700	420	480		SPHWHTL3DA0CF4QTU6

※ Bin option is available, please refer to data sheet for more details.

Small LES COB (C-series)

High lumen density COB – high intensity, suitable solution for narrow beam spot & down light

- Samsung new small LES COB adapted new flip chip
- Low droop characteristic by current & Thermal
- High reliability
- Completed 6,000 hours of LM-80 testing



Tc =85°C	LC010C	LC020C	LC040C	
LES	6 mm	8 mm	11 mm	
Vf	34.5 V			
Watt.	Typ.	9.3 W (270 mA)	18.6 W (540 mA)	37.3 W (1,080 mA)
	Max.	14.6 W (405 mA)	29.2 W (810 mA)	58.5 W (1,620 mA)
Dimension				
Size	12.0 x 15.0 mm		16.0 x 19.0 mm	

Product	CRI Min.	CCT (K)	Tc = 85°C Luminous Flux Typ. (lm)	Luminous Efficacy Typ. (lm/W)	IF (mA)	Part Number
LC010C	Vivid	3000	900	97	270	SPHWH2HDNA0VYHV3C1
		3500	925	99		SPHWH2HDNA0VYHU3C1
		4000	950	102		SPHWH2HDNA0VYHT3C1
		2700	871	93		SPHWH2HDNA07YHW3C1
		3000	892	96		SPHWH2HDNA07YHV3C1
		3500	903	97		SPHWH2HDNA07YHU3C1
	80	4000	924	99		SPHWH2HDNA07YHT3C1
		2700	998	107		SPHWH2HDNA05YHW3C1
		3000	1,062	114		SPHWH2HDNA05YHV3C1
		3500	1,113	119		SPHWH2HDNA05YHU3C1
		4000	1,156	124		SPHWH2HDNA05YHT3C1
		5000	1,211	130		SPHWH2HDNA05YHRTC1
LC020C	Vivid	3000	1,800	97	540	SPHWH2HDNC0VYHV3C1
		3500	1,850	99		SPHWH2HDNC0VYHU3C1
		4000	1,900	102		SPHWH2HDNC0VYHT3C1
		2700	1,742	93		SPHWH2HDNC07YHW3C1
		3000	1,784	96		SPHWH2HDNC07YHV3C1
		3500	1,805	97		SPHWH2HDNC07YHU3C1
	80	4000	1,848	99		SPHWH2HDNC07YHT3C1
		2700	1,996	107		SPHWH2HDNC05YHW3C1
		3000	2,124	114		SPHWH2HDNC05YHV3C1
		3500	2,226	119		SPHWH2HDNC05YHU3C1
		4000	2,313	124		SPHWH2HDNC05YHT3C1
		5000	2,421	130		SPHWH2HDNC05YHRTC1
LC040C	Vivid	3000	3,600	97	1,080	SPHWH2HDNE0VYHV3C1
		3500	3,700	99		SPHWH2HDNE0VYHU3C1
		4000	3,800	102		SPHWH2HDNE0VYHT3C1
		2700	3,483	93		SPHWH2HDNE07YHW3C1
		3000	3,568	96		SPHWH2HDNE07YHV3C1
		3500	3,610	97		SPHWH2HDNE07YHU3C1
	80	4000	3,695	99		SPHWH2HDNE07YHT3C1
		2700	3,993	107		SPHWH2HDNE05YHW3C1
		3000	4,248	114		SPHWH2HDNE05YHV3C1
		3500	4,452	119		SPHWH2HDNE05YHU3C1
		4000	4,626	124		SPHWH2HDNE05YHT3C1
		5000	4,842	130		SPHWH2HDNE05YHRTC1
		5700	4,842	130	SPHWH2HDNE05YHQTCT1	

※ Bin option is available, please refer to data sheet for more details.

D-Series

Providing strong portfolio for expanding various line up options

- Chip on Board (COB) solution makes it easy to design in
- Simple assembly reduces manufacturing & tooling cost
- Low thermal resistance
- Completed 6,000 hours of LM-80 testing



T _c = 85°C	LC003D	LC006D	LC009D	LC013D	LC016D	LC019D	LC026D	LC040D	LC060D	LC080D	
LES	9.8 mm			14.5 mm			22 mm				
V _f	34.6 V										
Watt.	Typ.	3.1 W (90 mA)	6.2 W (180 mA)	9.4 W (270 mA)	12.5 W (360 mA)	15.6 W (450 mA)	18.7 W (540 mA)	24.9 W (720 mA)	37.4 W (1,080 mA)	56.1 W (1,080 mA)	84.2 W (1,620 mA)
	Max.	8.6 W (230 mA)	17.2 W (460 mA)	25.9 W (690 mA)	34.5 W (920 mA)	43.1 W (1,150 mA)	51.8 W (1,380 mA)	69 W (1,840 mA)	103.5 W (2,760 mA)	143.4 W (2,760 mA)	215 W (4,140 mA)
Dimension											
Size	13.5 x 13.5 mm			19 x 19 mm			28 x 28 mm				

Product	CRI Min.	CCT (K)	T _c = 85°C		IF (mA)	Part Number
			Luminous Flux Typ. (lm)	Luminous Efficacy Typ. (lm/W)		
LC003D	80	2700	434	139	90	SPHWAHDNA25YZW3D1
		3000	457	147		SPHWAHDNA25YZV3D1
		3500	474	152		SPHWAHDNA25YZU3D1
		4000	480	154		SPHWAHDNA25YZT3D1
		5000	485	156		SPHWAHDNA25YZR3D1
	90	5700	485	156		SPHWAHDNA25YZQ3D1
		6500	480	154		SPHWAHDNA25YZP3D1
		2700	367	118		SPHWAHDNA27YZW3D1
		3000	384	123		SPHWAHDNA27YZV3D1
		3500	396	127		SPHWAHDNA27YZU3D1
LC006D	80	4000	404	130	180	SPHWAHDNA27YZT3D1
		2700	874	140		SPHWAHDNB25YZW3D1
		3000	919	148		SPHWAHDNB25YZV3D1
		3500	947	152		SPHWAHDNB25YZU3D1
		4000	969	156		SPHWAHDNB25YZT3D1
	90	5000	975	157		SPHWAHDNB25YZR3D1
		5700	975	157		SPHWAHDNB25YZQ3D1
		6500	964	155		SPHWAHDNB25YZP3D1
		2700	744	119		SPHWAHDNB27YZW3D1
		3000	780	125		SPHWAHDNB27YZV3D1
LC009D	80	3500	768	123	270	SPHWAHDNB27YZU3D1
		4000	784	126		SPHWAHDNB27YZT3D1
		2700	1,270	136		SPHWAHDNC25YZW3D1
		3000	1,342	144		SPHWAHDNC25YZV3D1
		3500	1,381	148		SPHWAHDNC25YZU3D1
	90	4000	1,414	151		SPHWAHDNC25YZT3D1
		5000	1,425	153		SPHWAHDNC25YZR3D1
		5700	1,425	153		SPHWAHDNC25YZQ3D1
		6500	1,408	151		SPHWAHDNC25YZP3D1
		2700	1,090	117		SPHWAHDNC27YZW3D1
LC013D	80	3000	1,141	122	360	SPHWAHDNC27YZV3D1
		3500	1,178	126		SPHWAHDNC27YZU3D1
		4000	1,204	129		SPHWAHDNC27YZT3D1
		2700	1,669	134		SPHWAHDND25YZW3D1
		3000	1,757	141		SPHWAHDND25YZV3D1
	90	3500	1,812	145		SPHWAHDND25YZU3D1
		4000	1,844	148		SPHWAHDND25YZT3D1
		5000	1,861	149		SPHWAHDND25YZR3D1
		5700	1,861	149		SPHWAHDND25YZQ3D1
		6500	1,834	147		SPHWAHDND25YZP3D1
LC016D	80	2700	1,427	115	450	SPHWAHDND27YZW3D1
		3000	1,494	120		SPHWAHDND27YZV3D1
		3500	1,547	124		SPHWAHDND27YZU3D1
		4000	1,580	127		SPHWAHDND27YZT3D1
		2700	2,169	139		SPHWAHDNE25YZW3D1
	90	3000	2,291	147		SPHWAHDNE25YZV3D1
		3500	2,376	153		SPHWAHDNE25YZU3D1
		4000	2,419	155		SPHWAHDNE25YZT3D1
		5000	2,440	157		SPHWAHDNE25YZR3D1
		5700	2,440	157		SPHWAHDNE25YZQ3D1
90	6500	2,419	155	SPHWAHDNE25YZP3D1		
	2700	1,860	119	SPHWAHDNE27YZW3D1		
	3000	1,970	127	SPHWAHDNE27YZV3D1		
	3500	2,029	130	SPHWAHDNE27YZU3D1		
4000	2,069	133	SPHWAHDNE27YZT3D1			

※ Bin option is available, please refer to data sheet for more details.

COB LEDs

Product	CRI Min.	CCT (K)	Tc = 85°C		IF (mA)	Part Number
			Luminous Flux Typ. (lm)	Luminous Efficacy Typ. (lm/W)		
LC019D	80	2700	2,581	138	540	SPHWAHDNF25YZW3D1
		3000	2,722	146		SPHWAHDNF25YZV3D1
		3500	2,805	150		SPHWAHDNF25YZU3D1
		4000	2,863	153		SPHWAHDNF25YZT3D1
		5000	2,894	155		SPHWAHDNF25YZR3D1
	90	2700	2,894	155		SPHWAHDNF25YZQ3D1
		3000	2,317	118		SPHWAHDNF27YZW3D1
		3500	2,402	124		SPHWAHDNF27YZV3D1
		4000	2,454	131		SPHWAHDNF27YZU3D1
		5000	2,454	131		SPHWAHDNF27YZT3D1
LC026D	80	2700	3,386	136	720	SPHWAHDNG25YZW3D1
		3000	3,558	143		SPHWAHDNG25YZV3D1
		3500	3,663	147		SPHWAHDNG25YZU3D1
		4000	3,736	150		SPHWAHDNG25YZT3D1
		5000	3,767	151		SPHWAHDNG25YZR3D1
	90	2700	3,767	151		SPHWAHDNG25YZQ3D1
		3000	3,736	150		SPHWAHDNG25YZP3D1
		3500	2,898	116		SPHWAHDNG27YZW3D1
		4000	3,048	122		SPHWAHDNG27YZV3D1
		5000	3,139	126		SPHWAHDNG27YZU3D1
LC040D	80	2700	5,246	140	1,080	SPHWAHDNK25YZW3D1
		3000	5,520	148		SPHWAHDNK25YZV3D1
		3500	5,689	152		SPHWAHDNK25YZU3D1
		4000	5,812	156		SPHWAHDNK25YZT3D1
		5000	5,839	156		SPHWAHDNK25YZR3D1
	90	2700	5,868	157		SPHWAHDNK25YZQ3D1
		3000	4,497	120		SPHWAHDNK27YZW3D1
		3500	4,751	127		SPHWAHDNK27YZV3D1
		4000	4,872	130		SPHWAHDNK27YZU3D1
		5000	4,979	133		SPHWAHDNK27YZT3D1
LC060D	80	2700	7,277	130	1,080	SPHWAHDNL251ZW3P9
		3000	7,667	137		SPHWAHDNL251ZV3Q3
		3500	7,904	141		SPHWAHDNL251ZU3Q5
		4000	8,075	144		SPHWAHDNL251ZT3Q6
		5000	8,113	144		SPHWAHDNL251ZR3Q7
	70	2700	8,151	145		SPHWAHDNL251ZQ3Q7
		3000	8,066	144		SPHWAHDNL271ZP3Q6
		4000	8,284	148		SPHWAHDNL231ZV3Q8
		5000	8,550	152		SPHWAHDNL231ZT3R1
		5000	8,683	155		SPHWAHDNL231ZR3R2
LC080D	80	2700	10,612	126	1,620	SPHWAHDNM251ZW3T1
		3000	11,201	133		SPHWAHDNM251ZV3T6
		3500	11,533	137		SPHWAHDNM251ZU3T9
		4000	11,780	140		SPHWAHDNM251ZT3U2
		5000	11,847	141		SPHWAHDNM251ZR3U2
	70	2700	11,904	141		SPHWAHDNM251ZQ3V0
		3000	11,723	139		SPHWAHDNM251ZP3V5
		4000	12,084	143		SPHWAHDNM231ZV3U5
		5000	12,483	148		SPHWAHDNM231ZT3U9
		5000	12,673	150		SPHWAHDNM231ZR3V0

※ Bin option is available, please refer to data sheet for more details.



Certification Support Program

To provide more valuable services for your successful business

Program Overview

Pre-Certification Test Support

Product structure, test and review by Samsung.
Samsung is an accredited partner of UL, VDE & KOLAS

Certification Accreditations Support

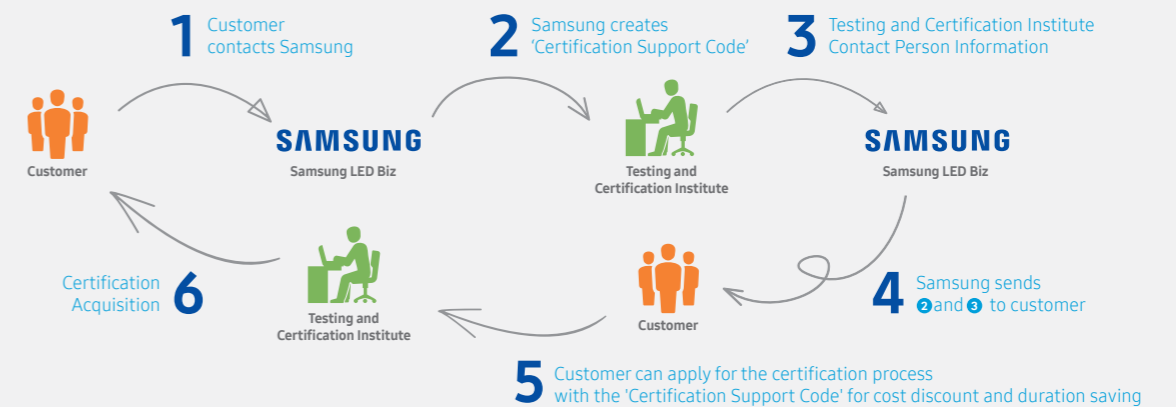
- Customer support for **Cost and Test Period Saving for the EU, US & ASIA certification**
- Global certification program roll out soon to be available

Customer Benefit

Certification	ETL, Energy Star, DLC ¹⁾ , FCC, LM 79	KS/High Efficiency	PSE	S-Mark	CE, ErP, ENEC, ENEC+, EU Eco-Label, GS mark	CCC/CQC			
Customer Location	US	Korea/China	-	-	EU/US/Asia	China	Korea	China	
Cost Discount	Testing	-20%	-30%	-30%	-30%	-20%	-30%	-20%	-30%
	Handling	-	-	-	-	-	-	-	-
Test Period Savings	-30 ~ -50%	-30 ~ -50%	-20 ~ -30%		-20 ~ -30%	-20 ~ -30%	-20 ~ -30%	-20 ~ -30%	
Company	Intertek		KTL (Korea Testing Laboratory)		TUV SUD		CCIC		
Branch	North America, China, Hong Kong, Korea		Korea, China		North America, Germany, China, Hong Kong, Singapore, Taiwan, Korea		Korea, China		

1) Energy Star, DLC's duration is not included for Lumen Maintenance test duration.
2) Discount rate is based on the standard price of Companies.

Process



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