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CSP Array 3X3
MR16 Application



CSP Array 2X2
Candle Application



CSP 6V
Bulb Application

Samsung Chip Scale Package (CSP) LEDs

Significantly scale down the size that allows for more flexible and compact designs

SAMSUNG

Added value provided with the advanced chip scale packaging technology

Small Form Factor

LES 70%
Circuit board 30%

Low Thermal Resistance

Better I_m/W at high current

CSP

Wide Beam Angle

- Easy to design optics
- Suitable design for omni directional bulb applications

High Reliability

Low FIT & No sulfurization
Simple structure:
no wire, no silver reflector

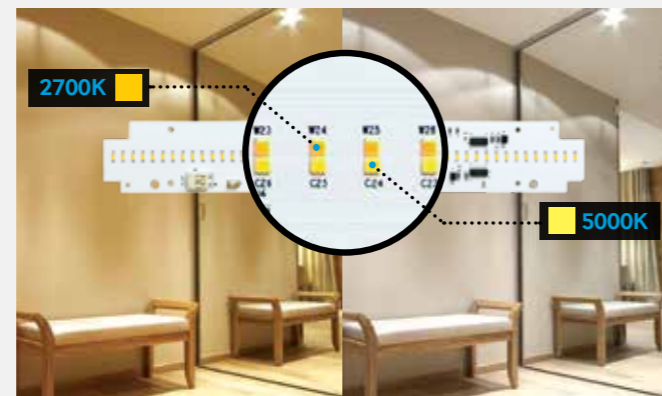
Superior Design Flexibility

Building Block



- Customizable array arrangement
- Greater freedom of design
- One time certification
- Faster time-to-market cycle
- Low inventory burden

CCT Tunability



Applications

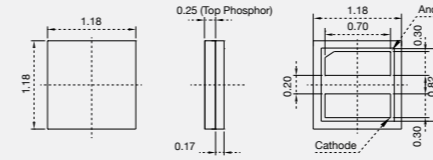
Bulb, Candle, MR16, PAR, Spot light



LM101A

Compact form factor for design flexibility

- 1 W class mid power LED
- LM80 (6000hrs) : Nov. 2015
- Compact footprint: $1.18 \times 1.18 \text{ mm}^2$



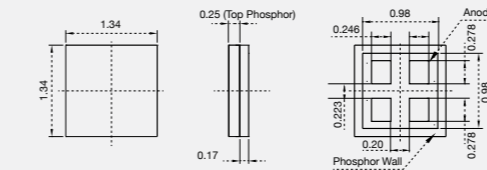
CRI Min.	CCT (K)	Luminous Flux (lm)		IF (mA)	Part Number
		Min.	Max.		
80	2700	49	65	150	SCS8WT78EPL1W0S06E
	3000	51	67		SCS8VT78EPL1V0S06E
	3500	52	68		SCS8UT78EPL1U0S06E
	4000	56	72		SCS8TT78EPL1T0S06E
	5000	58	74		SCS8RT78EPL1R0S06E
	5700	53	69	SCS8QT78EPL1Q0S06E	
	6500	52	68	SCS8PT78EPL1P0S06E	

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

LM102A

Compact form factor for design flexibility

- 6V, 1W class mid power LED
- LM80 (6000hrs) : Jun. 2016
- Compact footprint: $1.34 \times 1.34 \text{ mm}^2$



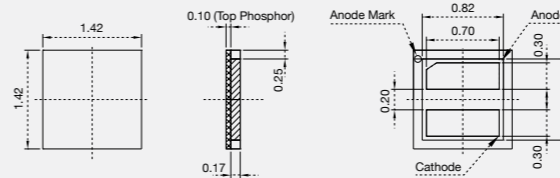
CRI Min.	CCT (K)	Luminous Flux (lm)		IF (mA)	Part Number
		Typ.			
80	2700	102		150 (5.9V)	SCS8WT93HPL2W0S0XX
	3000	106			SCS8VT93HPL2V0S0XX
	3500	109			SCS8UT93HPL2U0S0XX
	4000	116			SCS8TT93HPL2T0S0XX
	5000	119			SCS8RT93HPL2R0S0XX
	5700	116		SCS8QT93HPL2Q0S0XX	
	6500	112		SCS8PT93HPL2P0S0XX	

※ Bin option is available, please refer to data sheet for more details.
[Under development]

LM131A

Compact form factor for design flexibility

- 1W class mid power LED with white side wall
- Film on Chip structure
- Compact footprint: $1.42 \times 1.42 \text{ mm}^2$



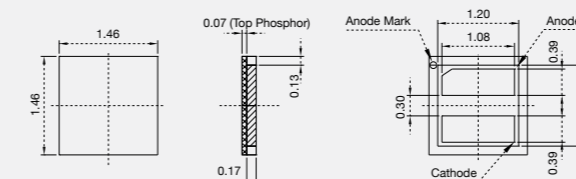
CRI Min.	CCT (K)	Luminous Flux (lm)		IF (mA)	Part Number
		Min.	Max.		
80	2700	82	106	300	SCS8WT78EFL1W08ECK
	3000	86	110		SCS8VT78EFL1V09FCK
	4000	94	118		SCS8TT78EFL1T0BHCK
	5000	98	122		SCS8RT78EFL1R0CICK
	6500	94	118		SCS8PT78EFL1P0BHCK

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

LH141A

Samsung flip chip provides optimized solution for torch / flash light

- 2 W class high power LED
- Film on Chip structure
- Plastic-free structure delivers low thermal resistance
- Compact footprint: $1.46 \times 1.46 \text{ mm}^2$



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.