

Product Change Notice

LM301Z+ & LM302Z+

- **Product1** : LM301Z+ (SPMWH3326MP*****)
- **Change** : H2S Protection Layer, Flux Spec, LED Quantity per Reel
- **Product2** : LM302Z+ (SPMWH3326FP*****)
- **Change** : H2S Protection Layer, Flux Spec , Vf (GB→GA), LED Quantity per Reel

Mar, 2020

SAMSUNG

LM301Z+ PCN

- H2S Protection Layer is added
- Nominal Flux range adjusted
- Scheduled to start manufacturing in W14 2020

CRI (R _a)	Nominal	As-Is		To-Be	
Min.	CCT (K)	Min.	Max.	Min.	Max.
70	3000	32	36	33	36
	3500	34	38	34	37
	4000	34	38	35	38
	5000	34	38	35	38
	5700	34	38	35	38
80	2700	32	36	30	33
	3000	32	36	31	34
	3500	32	36	32	35
	4000	34	38	33	36
	5000	34	38	33.5	36.5
	5700	34	38	33	36
	6500	32	36	33	36
90	2700	26	30	25	28
	3000	26	30	26	29
	3500	26	30	27	30
	4000	28	32	28	31
	5000	28	32	28	31
	5700	28	32	28	31
	6500	28	32	28	31

[# of Package in Reel for new LM301Z+/LM302Z+]

# of package in Reel	As is	To be
	5K	4K

※ Depending on the packing and shipping schedule, IV spec may be indicated with previous IV spec in the outgoing inspection document for a while.

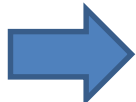
LM302Z+ PCN

- H2S Protection Layer is added
- Nominal Flux range adjusted
- Scheduled to start manufacturing in W14 2020

CRI (R _a)	Nominal	As-Is		To-Be	
Min.	CCT (K)	Min.	Max.	Min.	Max.
70	3000	133	151	139	149
	3500	133	151	141	151
	4000	142	160	144	154
	5000	142	160	146	156
	5700	142	160	144	154
80	2700	124	142	125	135
	3000	124	142	126	136
	3500	133	151	134	144
	4000	133	151	134	144
	5000	133	151	134	144
	5700	133	151	134	144
	6500	133	151	132	142
90	2700	97	115	103	113
	3000	106	124	107	117
	3500	106	124	114	124
	4000	115	133	116	126
	5000	115	133	116	126
	5700	115	133	116	126
	6500	115	133	116	126

[Product part number – Vf range change]

SPMWH3326FP*GB**** → SPMWH3326FP*GA****

Rank	Bin	Min.	Max.		Rank	Bin	Min.	Max.
	BZ	5.8	6			AZ	6	6.1
GB	B1	6	6.2		GA	A1	6.1	6.2
	B2	6.2	6.4			A2	6.2	6.3
	B3	6.4	6.6			A3	6.3	6.4

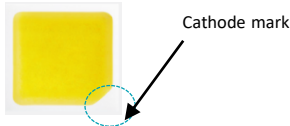
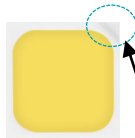
[# of Package in Reel for new LM301Z+/LM302Z+]

# of package in Reel	As is	To be
	5K	4K

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Annex [LM301Z+, LM302Z+]

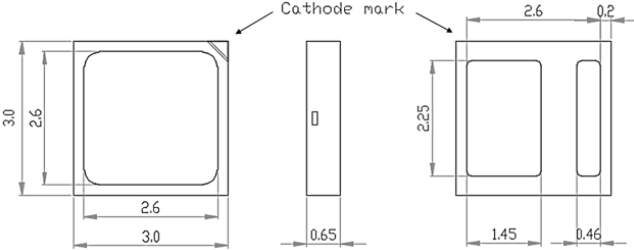
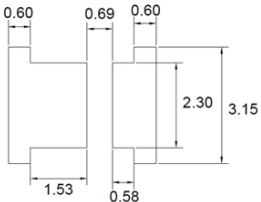
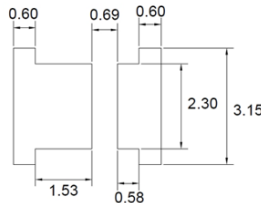
From prior information on change of production site and cathode mark adaption
Original PCN distributed in Dec 2019

Production Site		Current	New
Material	Chip	Epi-up	Same
	L/F	EMC	Same
LES Size		2.6 x 2.6 mm	Same
Dimension		3.0 x 3.0 x 0.65 mm	Same
Radiation diagram		120°	Same
LM80		10Khrs Report will be distributed (20' Mar)	
Product Code		SPMWH3326MP*****	Same
Appearance			 No need to change foot print. Position of Cathode mark is changed. (Refer to 4page)

Annex [LM301Z+, LM302Z+]

From prior information on change of production site and cathode mark adaption
Original PCN distributed in Dec 2019

■ No need to change foot print. Position of Cathode mark is changed.

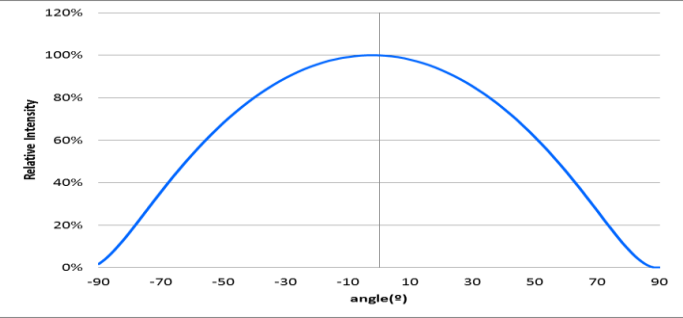
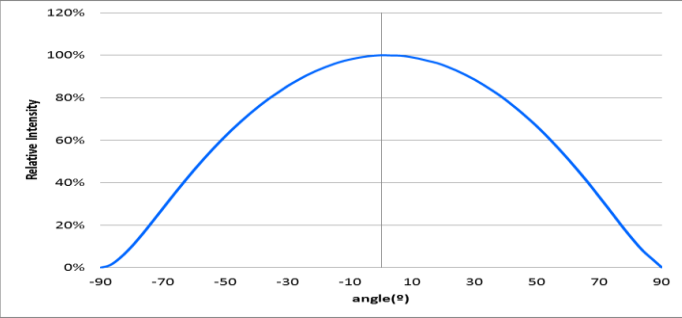
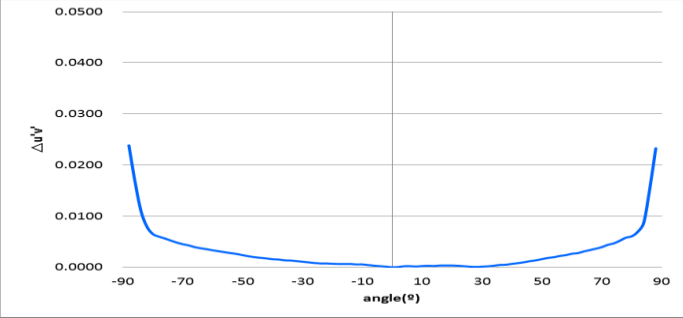
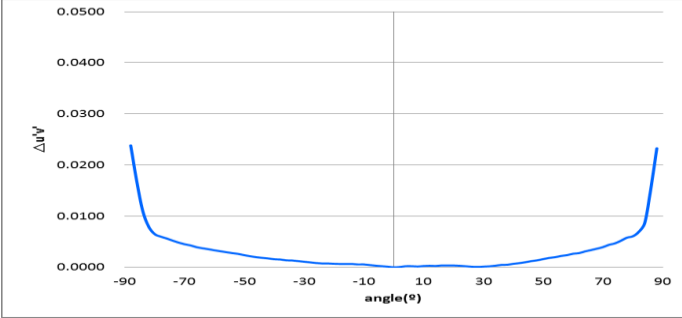
	Current	Changed
PKG Size		
Foot Print	 [RECOMMENDED PCB SOLDER PAD]	 [RECOMMENDED PCB SOLDER PAD]

Tolerance is ± 0.1 mm

Annex [LM301Z+, LM302Z+]

From prior information on change of production site and cathode mark adaptations
Original PCN distributed in Dec 2019

■ No change Radiation diagram & Color Over Angle

	Current	Changed
Radiation diagram		
Color Over Angle		

Annex [LM301Z+, LM302Z+]

From prior information on change of production site and cathode mark adaptations
Original PCN distributed in Dec 2019

Test item	Test Condition	Test Time or cycle	Sample Q'ty
High Temperature Life Test	85 °C, max IF	1000 h	22
High Temperature Humidity Life Test	85 °C, 85 % RH, max IF	1000 h	22
High Temperature Storage	120 °C	1000 h	11
High Temperature Humidity Storage	85 °C, 85 % RH	1000 h	11
Powered Temperature Cycle Test	-40 °C / 10 min ↔ 85 °C / 10 min, sweep 20 min cycle on/off: each 5 min, max IF	1000hrs	22
Thermal Cycle	-45 °C / 15 min ↔ 125 °C / 15 min → Hot plate 180 °C	500 cycles	100
ESD (HBM)	R1:10 MΩ, R2:1.5 kΩ, C:100 pF, V: ±5 kV	5 times	30
ESD (MM)	R1:10 MΩ, R2:0, C:200 pF, V: ±0.5 kV	5 times	30
Vibration Test	20~2000~20 Hz, 200 m/s ² , sweep 4 min X, Y, Z 3 direction, each 1 cycle	4 cycles	11
Mechanical Shock Test	1500 g, 0.5 ms 3 shocks each X-Y-Z axis	5 cycles	11
Sulfur Test	25°C 75%RH, H2S 15ppm	504h	22