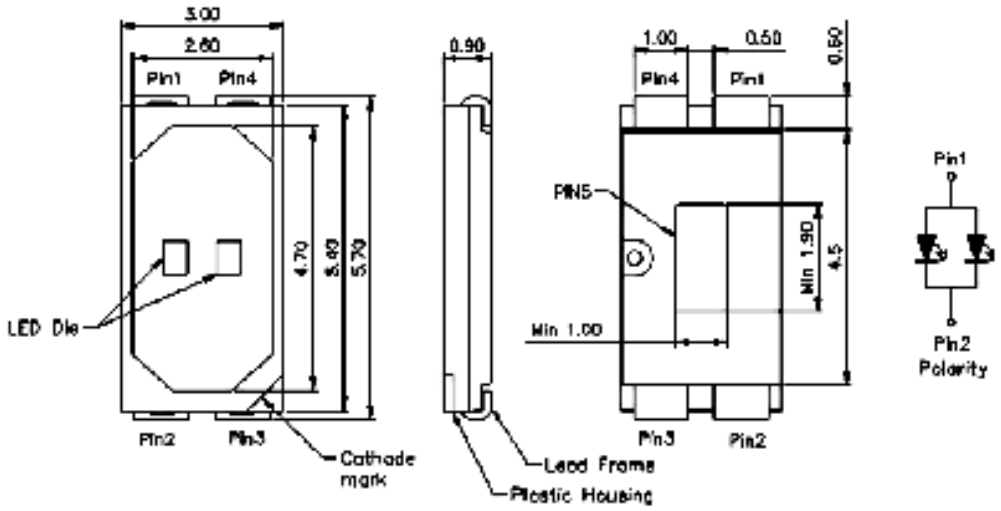
SHARLIGHT ELECTRONICS CO., LTD.

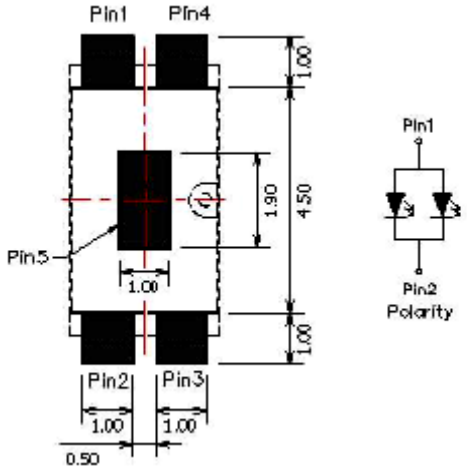
SPECIFICATION FOR APPROVAL

Part No.：SLM-5630Nx40-xx2-HT

Package Dimensions



Pin5&Pin3 is connected with heat slug



Part NO.	Chip Material	Color Temperature	Emission Color	CRI
SLM-5630NW40-B32-HT	InGaN	5250~9500K	**Cool** White	≧80
SLM-5630NS40-B32-HT	InGaN	3750~5250K	**Natural** White	≧80
SLM-5630NY40-B32-HT	InGaN	2750~3750K	**Warm** White	≧80

Notes:

1. All dimensions are in millimeters.

2. Tolerance is ±0.25mm unless otherwise noted.

3. Specifications are subject to change without notice.

LISTER：周素華 01-08-14	EDITOR： 01-08-14	DATE：01-08-14	REV：A

SHARLIGHT ELECTRONICS CO., LTD.

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Part No.：SLM-5630Nx40-xx2-HT

Absolute Maximum Ratings at TA=25℃

Parameter	Maximum Rating	Unit
Power Dissipation	510	mW
Peak Forward Current (Condition for IFP per chip is pulse of 1/10 duty and 0.1msec width)	200	mA
Forward Current	150	mA
Reverse Voltage	5	V
Operating Temperature Range	-40℃ to + 80℃	
Storage Temperature Range	-40℃ to + 100℃	

Electrical / Optical Characteristics at TA=25℃

(Each chip @ 150mA, TA=25℃)

Color	Part No.	CRI	Lumen Performance	VF(V)	
			Flux(lm) Typ	min	max
Cool White	SLM-5630NW40-B32-HT	≧80	52.0	2.8	3.4
Neutral White	SLM-5630NS40-B32-HT	≧80	51.5		
Warm White	SLM-5630NY40-B32-HT	≧80	51.5		

Bin Code.

Vf Bin:

Bin Code	Spec. Range
H1	2.8-2.9V
H2	2.9-3.0V
H3	3.0-3.1V
H4	3.1-3.2V
J1	3.2-3.3V
J2	3.3-3.4V

Forward Voltage Measurement Allowance is ±0.05V

IV Bin:

Bin Code	Spec. Range
RC2	45.36-48.44lm
RD2	48.44-51.7lm
SA3	51.7-55.3lm
SB3	55.3-58.9lm

It maintains a tolerance of ±10% on IV

SHARLIGHT ELECTRONICS CO., LTD.

SPECIFICATION FOR APPROVAL

Part No.：SLM-5630Nx40-xx2-HT

Color Rank:

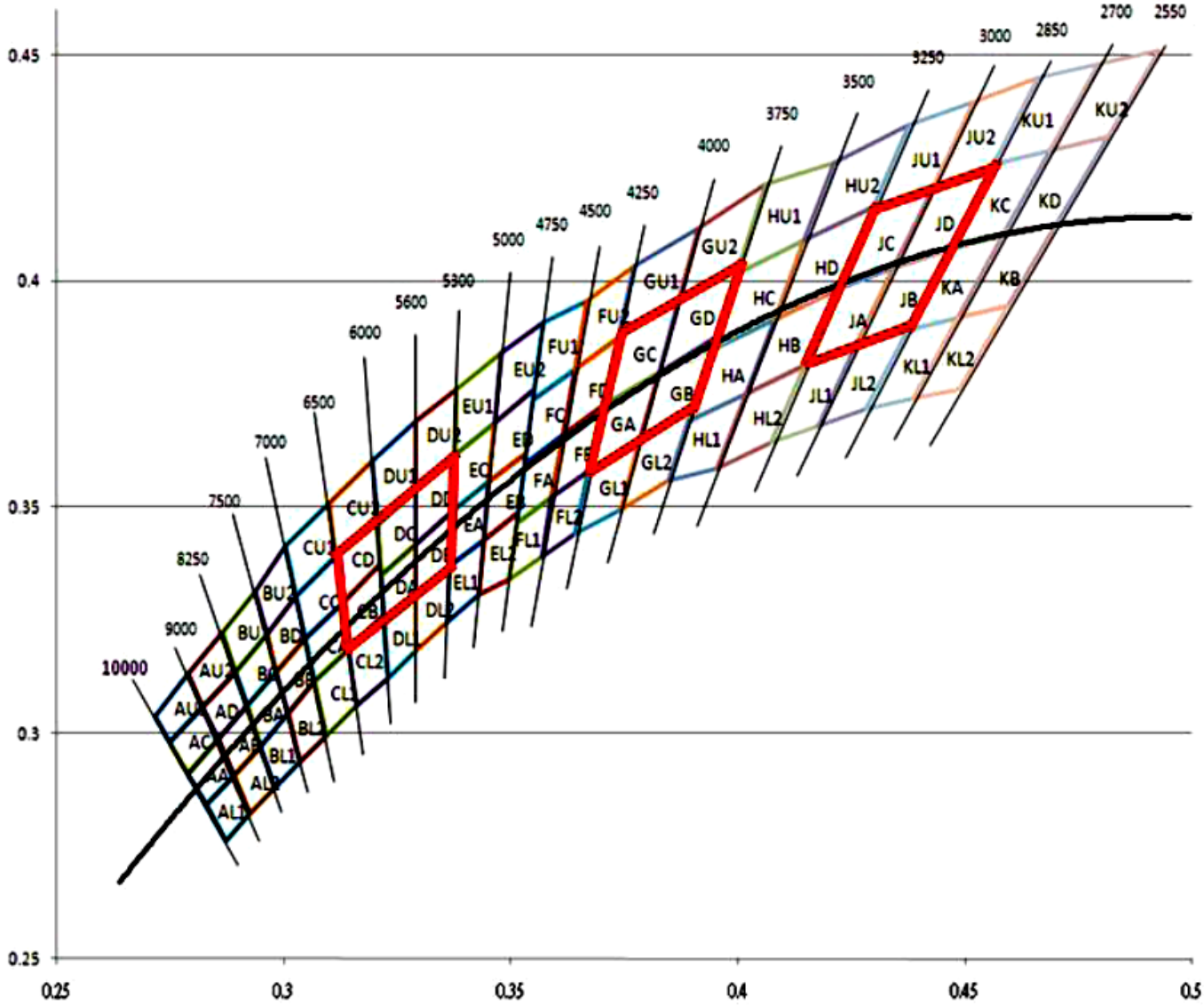
	0.283	0.284		0.295	0.297		0.3068	0.3113		0.3222	0.3243		0.3366	0.3369
	0.279	0.291		0.292	0.306		0.3048	0.3207		0.3215	0.335		0.3371	0.349
AA	0.2855	0.2985	BA	0.2984	0.3133	CA	0.313	0.329	DA	0.329	0.3417	EA	0.3451	0.3554
	0.289	0.2905		0.3009	0.3042		0.3144	0.3186		0.329	0.33		0.344	0.3427
	0.283	0.284		0.295	0.297		0.3068	0.3113		0.3222	0.3243		0.3366	0.3369
	0.289	0.2905		0.3009	0.3042		0.3144	0.3186		0.329	0.33		0.344	0.3427
	0.2855	0.2985		0.2984	0.3133		0.313	0.329		0.329	0.3417		0.3451	0.3554
AB	0.292	0.306	BB	0.3048	0.3207	CB	0.3213	0.3373	DB	0.3371	0.349	EB	0.3533	0.362
	0.295	0.297		0.3068	0.3113		0.3221	0.3261		0.3366	0.3369		0.3515	0.3487
	0.289	0.2905		0.3009	0.3042		0.3144	0.3186		0.329	0.33		0.344	0.3427
	0.279	0.291		0.292	0.306		0.3048	0.3207		0.3215	0.335		0.3371	0.349
	0.275	0.298		0.2895	0.3135		0.3028	0.3304		0.3207	0.3462		0.3376	0.3616
AC	0.28225	0.30575	BC	0.2962	0.322	CC	0.3115	0.3391	DC	0.329	0.3538	EC	0.3463	0.3687
	0.2855	0.2985		0.2984	0.3133		0.313	0.329		0.329	0.3417		0.3451	0.3554
	0.279	0.291		0.292	0.306		0.3048	0.3207		0.3215	0.335		0.3371	0.349
	0.2855	0.2985		0.2984	0.3133		0.313	0.329		0.329	0.3417		0.3451	0.3554
	0.28225	0.30575		0.2962	0.322		0.3115	0.3391		0.329	0.3538		0.3463	0.3687
AD	0.2895	0.3135	BD	0.3028	0.3304	CD	0.3205	0.3481	DD	0.3376	0.3616	ED	0.3551	0.376
	0.292	0.306		0.3048	0.3207		0.3213	0.3373		0.3371	0.349		0.3533	0.362
	0.2855	0.2985		0.2984	0.3133		0.313	0.329		0.329	0.3417		0.3451	0.3554
	0.2874	0.276		0.298	0.288		0.3093	0.2993		0.3231	0.312		0.3361	0.3245
	0.283	0.284		0.295	0.297		0.3068	0.3113		0.3222	0.3243		0.3366	0.3369
AL1	0.289	0.2905	BL1	0.3009	0.3042	CL1	0.3144	0.3186	DL1	0.329	0.33	EL1	0.344	0.3428
	0.2925	0.282		0.3037	0.2937		0.3161	0.3059		0.329	0.318		0.3429	0.3307
	0.2874	0.276		0.298	0.288		0.3093	0.2993		0.3231	0.312		0.3361	0.3245
	0.2925	0.282		0.3037	0.2937		0.3161	0.3059		0.329	0.318		0.3429	0.3307
	0.289	0.2905		0.3009	0.3042		0.3144	0.3186		0.329	0.33		0.344	0.3428
AL2	0.295	0.297	BL2	0.3068	0.3113	CL2	0.3221	0.3261	DL2	0.3366	0.3369	EL2	0.3515	0.3487
	0.298	0.288		0.3093	0.2993		0.3231	0.312		0.3361	0.3245		0.3495	0.3339
	0.2925	0.282		0.3037	0.2937		0.3161	0.3059		0.329	0.318		0.3429	0.3307
	0.275	0.298		0.2895	0.3135		0.3028	0.3304		0.3207	0.3462		0.3376	0.3616
	0.2718	0.3036		0.2864	0.3221		0.3005	0.3415		0.3196	0.3602		0.3381	0.3762
AU1	0.279	0.313	BU1	0.2937	0.3312	CU1	0.3099	0.3509	DU1	0.329	0.369	EU1	0.348	0.384
	0.28225	0.30575		0.2962	0.322		0.3115	0.3391		0.329	0.3538		0.3463	0.3687
	0.275	0.298		0.2895	0.3135		0.3028	0.3304		0.3207	0.3462		0.3376	0.3616
	0.28225	0.30575		0.2962	0.322		0.3115	0.3391		0.329	0.3538		0.3463	0.3687
	0.279	0.313		0.2937	0.3312		0.3099	0.3509		0.329	0.369		0.348	0.384
AU2	0.2864	0.3221	BU2	0.3005	0.3415	CU2	0.3196	0.3602	DU2	0.3381	0.3762	EU2	0.3571	0.3907
	0.2895	0.3135		0.3028	0.3304		0.3205	0.3481		0.3376	0.3616		0.3551	0.376
	0.28225	0.30575		0.2962	0.322		0.3115	0.3391		0.329	0.3538		0.3463	0.3687

	0.3512	0.3465		0.367	0.3578		0.3889	0.369		0.4147	0.3814		0.4373	0.3893
	0.353	0.3597		0.3702	0.3722		0.3941	0.3848		0.4221	0.3984		0.4465	0.4071
FA	0.3615	0.3659	GA	0.3825	0.3798	HA	0.408	0.3916	JA	0.4342	0.4028	KA	0.4582	0.4099
	0.359	0.3521		0.3783	0.3646		0.4017	0.3751		0.4259	0.3853		0.4483	0.3919
	0.3512	0.3465		0.367	0.3578		0.3889	0.369		0.4147	0.3814		0.4373	0.3893
	0.359	0.3521		0.3783	0.3646		0.4017	0.3751		0.4259	0.3853		0.4483	0.3919
	0.3615	0.3659		0.3825	0.3798		0.408	0.3916		0.4342	0.4028		0.4582	0.4099
FB	0.3702	0.3722	GB	0.395	0.3875	HB	0.4221	0.3984	JB	0.4465	0.4071	KB	0.47	0.4126
	0.367	0.3578		0.3898	0.3716		0.4147	0.3814		0.4373	0.3893		0.4593	0.3944
	0.359	0.3521		0.3783	0.3646		0.4017	0.3751		0.4259	0.3853		0.4483	0.3919
	0.353	0.3597		0.3702	0.3722		0.3941	0.3848		0.4221	0.3984		0.4465	0.4071
	0.3548	0.3736		0.3736	0.3874		0.3996	0.4015		0.4299	0.4165		0.4562	0.426
FC	0.3641	0.3804	GC	0.3869	0.3958	HC	0.4146	0.4089	JC	0.443	0.4212	KC	0.4687	0.4289
	0.3615	0.3659		0.3825	0.3798		0.408	0.3916		0.4342	0.4028		0.4582	0.4099
	0.353	0.3597		0.3702	0.3722		0.3941	0.3848		0.4221	0.3984		0.4465	0.4071
	0.3615	0.3659		0.3825	0.3798		0.408	0.3916		0.4342	0.4028		0.4582	0.4099
	0.3641	0.3804		0.3869	0.3958		0.4146	0.4089		0.443	0.4212		0.4687	0.4289
FD	0.3736	0.3874	GD	0.4006	0.4044	HD	0.4299	0.4165	JD	0.4562	0.426	KD	0.4813	0.4319
	0.3702	0.3722		0.395	0.3875		0.4221	0.3984		0.4465	0.4071		0.47	0.4126
	0.3615	0.3659		0.3825	0.3798		0.408	0.3916		0.4342	0.4028		0.4582	0.4099
	0.3495	0.3339		0.364	0.344		0.3846	0.3557		0.4073	0.3644		0.4281	0.3715
	0.3512	0.3465		0.367	0.3578		0.3889	0.369		0.4147	0.3814		0.4373	0.3893
FL1	0.359	0.3521	GL1	0.3783	0.3646	HL1	0.4017	0.3751	JL1	0.4259	0.3853	KL1	0.4483	0.3919
	0.3567	0.3389		0.3741	0.3494		0.3954	0.3586		0.4176	0.3678		0.4384	0.3739
	0.3495	0.3339		0.364	0.344		0.3846	0.3557		0.4073	0.3644		0.4281	0.3715
	0.3567	0.3389		0.3741	0.3494		0.3954	0.3586		0.4176	0.3678		0.4384	0.3739
	0.359	0.3521		0.3783	0.3646		0.4017	0.3751		0.4259	0.3853		0.4483	0.3919
FL2	0.367	0.3578	GL2	0.3898	0.3716	HL2	0.4147	0.3814	JL2	0.4373	0.3893	KL2	0.4593	0.3944
	0.364	0.344		0.3846	0.3557		0.4073	0.3644		0.4281	0.3715		0.4486	0.3762
	0.3567	0.3389		0.3741	0.3494		0.3954	0.3586		0.4176	0.3678		0.4384	0.3739
	0.3548	0.3736		0.3736	0.3874		0.3996	0.4015		0.4299	0.4165		0.4562	0.426
	0.3571	0.3907		0.3771	0.4034		0.4062	0.4213		0.4377	0.4346		0.4659	0.4449
FU1	0.3668	0.3957	GU1	0.3913	0.4118	HU1	0.4212	0.4262	JU1	0.4518	0.4396	KU1	0.4792	0.4479
	0.3641	0.3804		0.3869	0.3958		0.4146	0.4089		0.443	0.4212		0.4687	0.4289
	0.3548	0.3736		0.3736	0.3874		0.3996	0.4015		0.4299	0.4165		0.4562	0.426
	0.3641	0.3804		0.3869	0.3958		0.4146	0.4089		0.443	0.4212		0.4687	0.4289
	0.3668	0.3957		0.3913	0.4118		0.4212	0.4262		0.4518	0.4396		0.4792	0.4479
FU2	0.3771	0.4034	GU2	0.4062	0.4213	HU2	0.4377	0.4346	JU2	0.4659	0.4449	KU2	0.4926	0.4512
	0.3736	0.3874		0.4006	0.4044		0.4299	0.4165		0.4562	0.426		0.4813	0.4319
	0.3641	0.3804		0.3869	0.3958		0.4146	0.4089		0.443	0.4212		0.4687	0.4289

LISTER：周素華 01-08-14	EDITOR： 01-08-14	DATE：01-08-14	REV：A

Part No.：SLM-5630Nx40-xx2-HT

CCT:



Note: It maintains a tolerance of ±250K on CCT

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SHARLIGHT ELECTRONICS CO., LTD.

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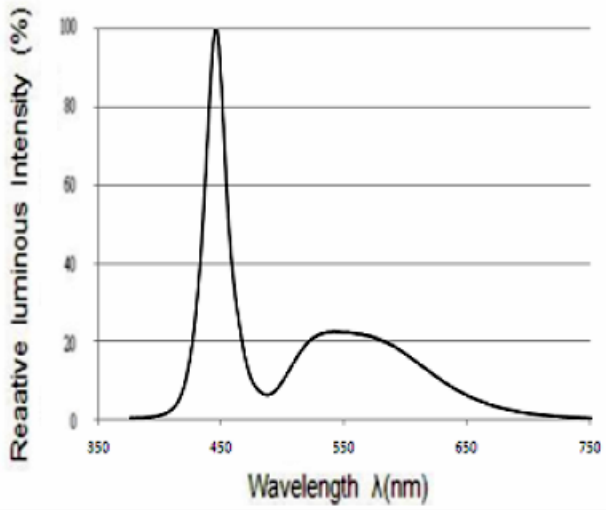
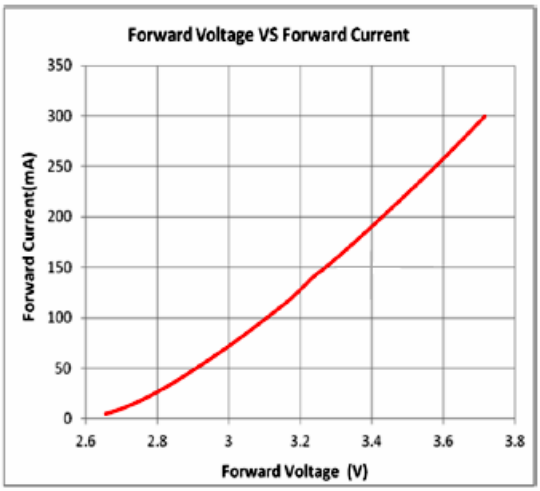
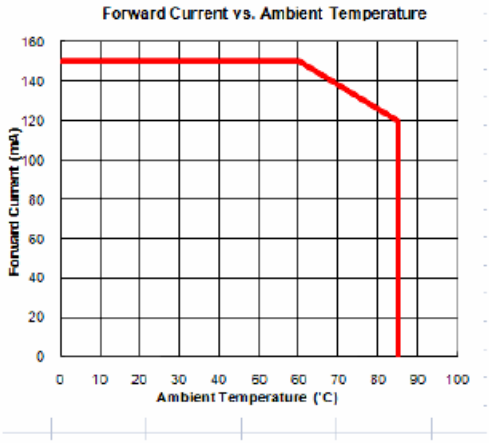
Part No.：SLM-5630Nx40-xx2-HT

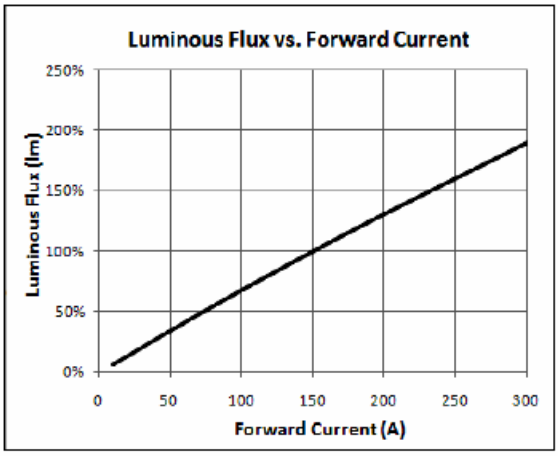
Typical Electro-Optical-Thermal Characteristics Curves

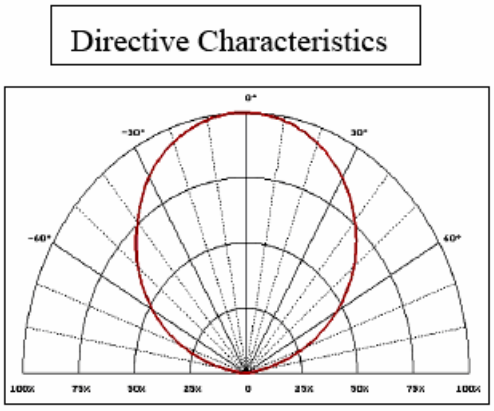
(TA=25℃ Unless Otherwise Noted)

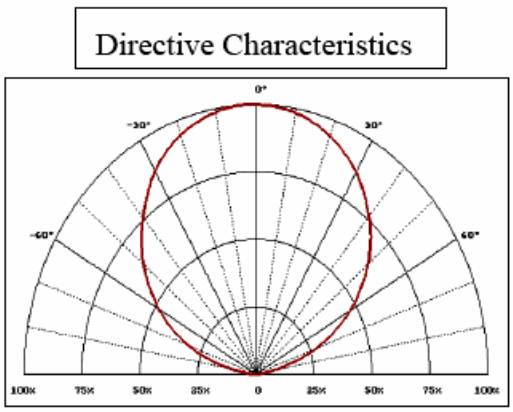












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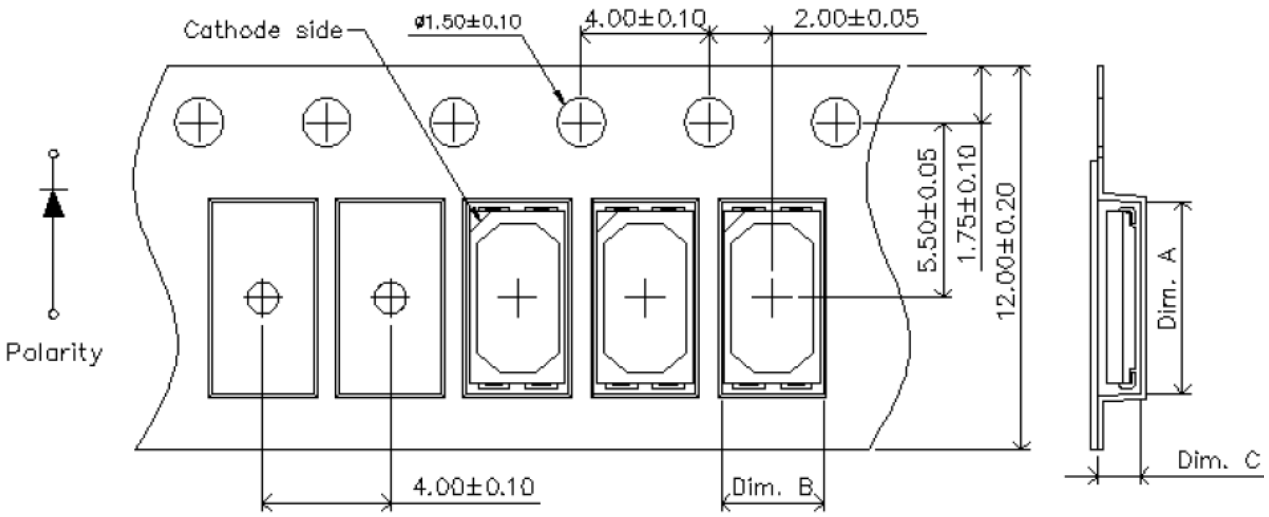
SHARLIGHT ELECTRONICS CO., LTD.

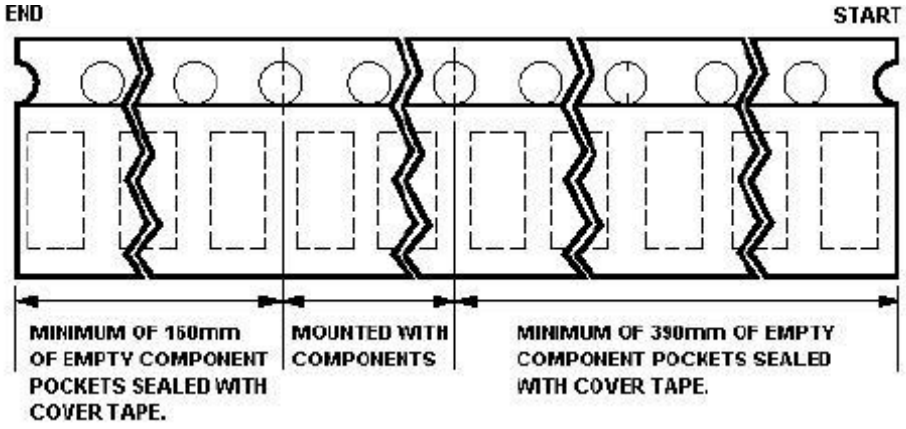
SPECIFICATION FOR APPROVAL

Part No.：SLM-5630Nx40-xx2-HT

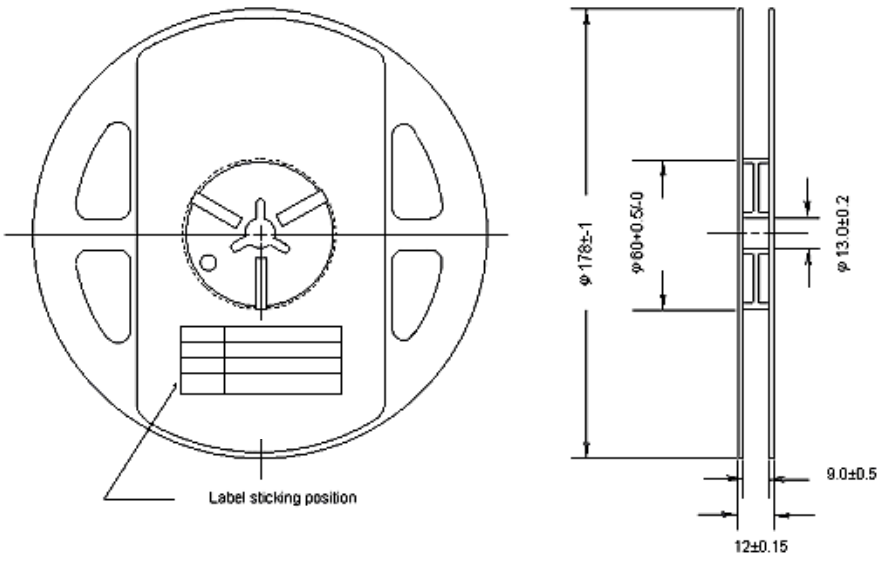
Packaging Tape, Reel, and Packing Model Tape Dimension Quantity: 2000 PCS/Reel



Dim. A	Dim. B	Dim. C	Q'ty/Reel
6.0±0.1	3.2±0.1	1.1±0.1	2K



Reel Dimension



5 Reels per box

LISTER：周素華 01-08-14	EDITOR： 01-08-14	DATE：01-08-14	REV：A

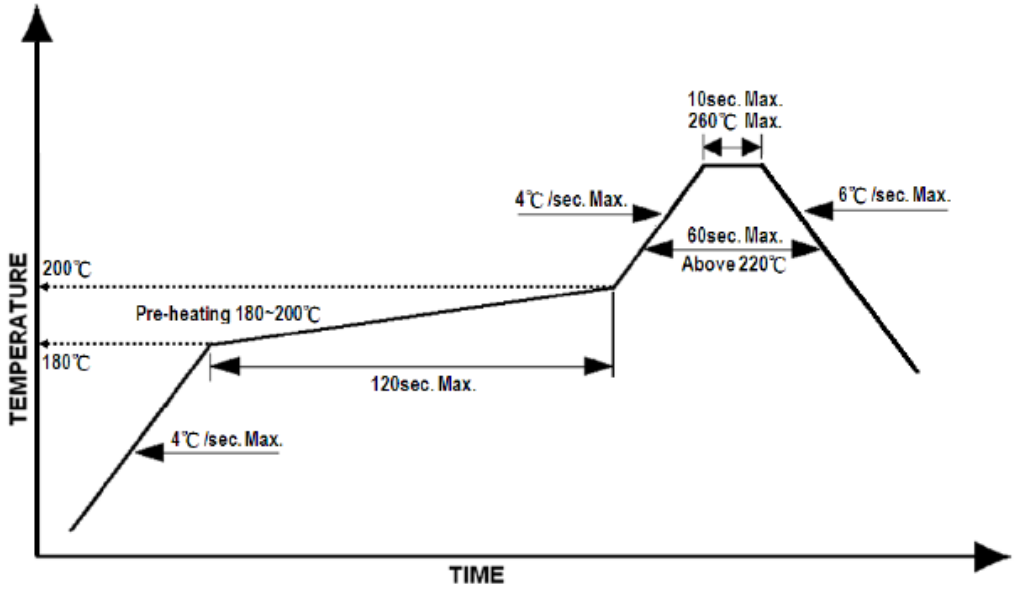
Part No.：SLM-5630Nx40-xx2-HT

Reflow Soldering

Recommend soldering paste specifications:

1. Operating temp.: Above 220 °C ,60 sec.
2. Peak temp.:260 °CMax.,10sec Max.
3. Reflow soldering should not be done more than two times.
4. Never attempt next process until the component is cooled down to room temperature after reflow.
5. The recommended reflow soldering profile (measured on the surface of the LED terminal) is as following:

Lead-free Solder Profile



Reworking

- Rework should be completed within 5 seconds under 260 °C.
- The iron tip must not come in contact with the copper foil.
- Twin-head type is preferred.

Cleaning

Following are cleaning procedures after soldering:

- An alcohol-based solvent such as isopropyl alcohol (IPA) is recommended.
- Temperature x Time should be 50°C x 30sec. or <30°C x 3min
- Ultrasonic cleaning: < 15W/ bath; bath volume ≤ 1liter
- Curing: 100 °C max, <3min

Part No.：SLM-5630Nx40-xx2-HT

※Note：

Recommended storage conditions：

1. Storage Condition:

   a. don't open the sealed bag until the Reflow Soldering。

   b. before open the sealed bag, please keep bag at Ambient Temperature from 5 to 25°C(41°F~77°F) and Relative Humidity < 60%。

   c. storage life: within 6 months。

2. Once overdue the storage life or after open the sealed bag for 12 hours , the LED has to be oven at 70°C for 24 hours before the Reflow Soldering。

3. After oven the LED, the Reflow Soldering has to be completed within 12 hours.。

   Otherwise, the oven LED has to be sealed in bag again and storage at Ambient Temperature of 23 +/- 5°C & RH 5~30%。