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# DATA SHEET

ESL NO.. : ESS-2835GP3JC3P9V

CUS NO. :

REV : A / 0

Producer: Eden

Auditor: \_\_\_\_\_

Approver: Jack

CUSTOMER'S APPROVAL : \_\_\_\_\_

DCC : \_\_\_\_\_



2835 SMD LED

ESS-2835GP3JC3P9V

REV:A / 0

※ **Features:**

1. PLCC-2 package.
2. Silicone resin.
3. High luminous Intensity and high efficiency.
4. High Color rendering index.
5. Low Color Tolerance Adjustment.
6. 120° wide viewing angle.
7. Compatible with automatic placement equipment.
8. Compatible with reflow solder process.
9. Suitable for all SMT assembly methods.
10. Doesn' t contain restriction Substance, comply ROHS standard.

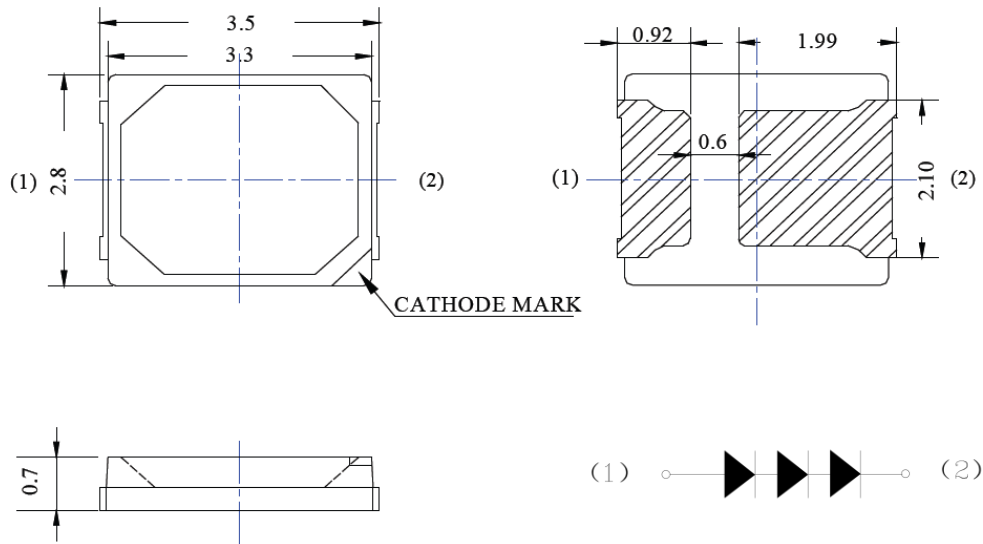
※ **Applications:**

1. Indoor Displays.
2. Backlighting (illuminated advertising, general lighting).
3. Substitution of fluorescent lamps.

※ **Chip Material:**

- 1.Dice Materia:InGaN
- 2.Light Color:White
- 3.Lens Color ;Yellow Diffused

※ Package Outline Dimension:



Unit: mm

Figure: 1W power thin series circuit diagram

Tolerance:  $\pm 0.2\text{mm}$  unless otherwise noted

Encapsulating Resin: Silicon Resin

Package: Heat-Resistant Polymer



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### ※ Absolute Maximum Ratings(Ta=25°C)

Symbol	DESCRIPTION	Rated	Unit
Topr	Operating Temperature Range	-40°C ~ +100°C	
Tstg	Storage Temperature Range	-40°C ~ +100°C	
VR	Reverse Voltage Per Chip	5	V
PD	Power Dissipation Per Chip	1000	mW
IFp	Peak Forward Current Per Chip	100	mA

IFP condition: pulse width  $\leq 0.1\text{ms}$ , duty cycle  $\leq 1/10$ .

### ※ Electrical-optical characteristics(Ta=25°C)

#### ELECTRO-OPTICAL CHARACTERISTICS : ( Ta = 25°C )

SYMBOL	PARAMETER	TEST CONDITION	MIN.	TYP	MAX	UNIT
VF	Forward Voltage	IF = 100mA	8.0		9.5	V
IF	Peak Forward Current	VF=10V		100		mA
2 $\theta$ 1/2	Half Intensity Angle	IF = 100mA	----	120	----	deg
IV	Luminous Intensity	IF = 100mA	110		120	lm
IR	Reverse Current	VR = 5V	----	----	5	$\mu\text{A}$
CCT	Color Temperature	IF = 100mA	6000		6500	K
RA	Rendering Index	IF = 100mA	90			
ESD	Electro-Static discharge	IF = 100mA		2000		v

Note: 1. Tolerance of Luminous Intensity  $\pm 10\%$ .

2. Tolerance of Forward voltage  $\pm 0.05\text{V}$ .

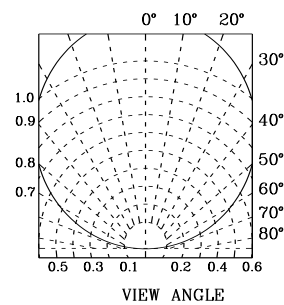
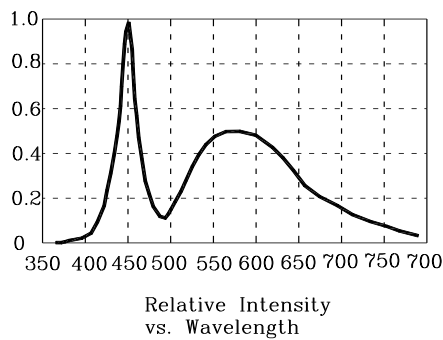
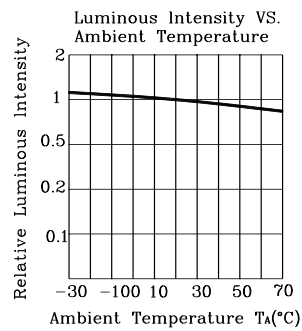
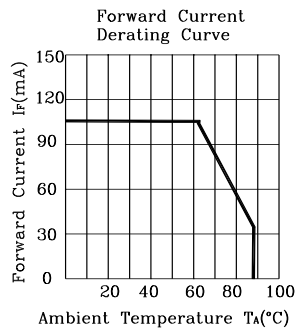
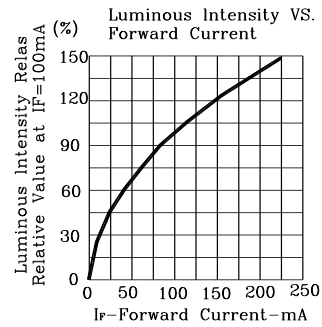
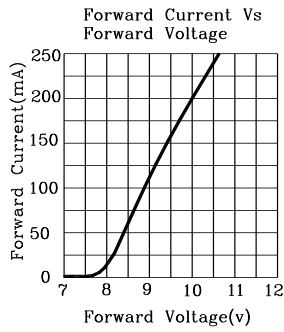


# 2835 SMD LED

## ESS-2835GP3JC3P9V

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### ※ Typical Electro-Optical Characteristics Curves



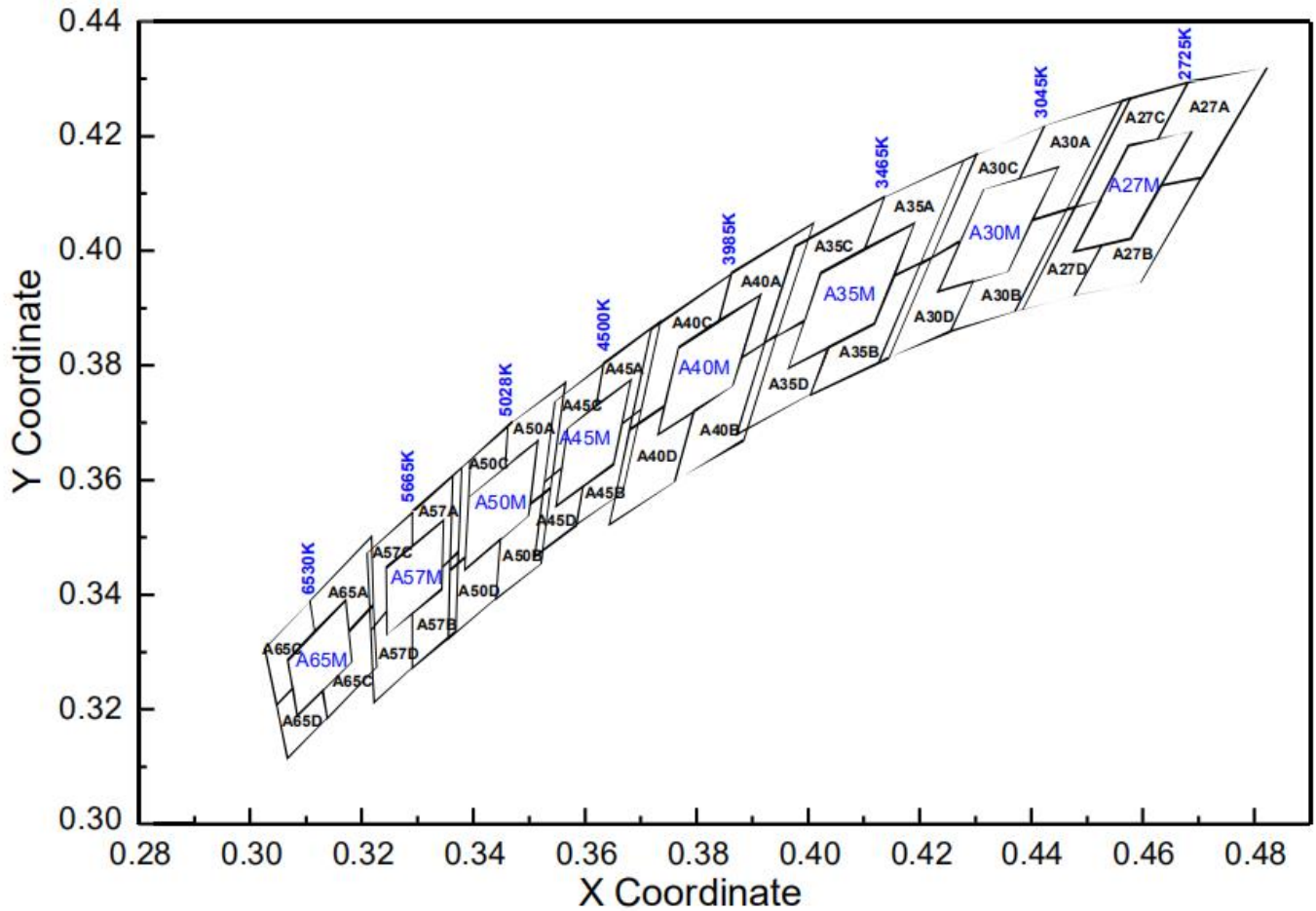


# 2835 SMD LED

## ESS-2835GP3JC3P9V

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### ※ Color Chromaticity Groups





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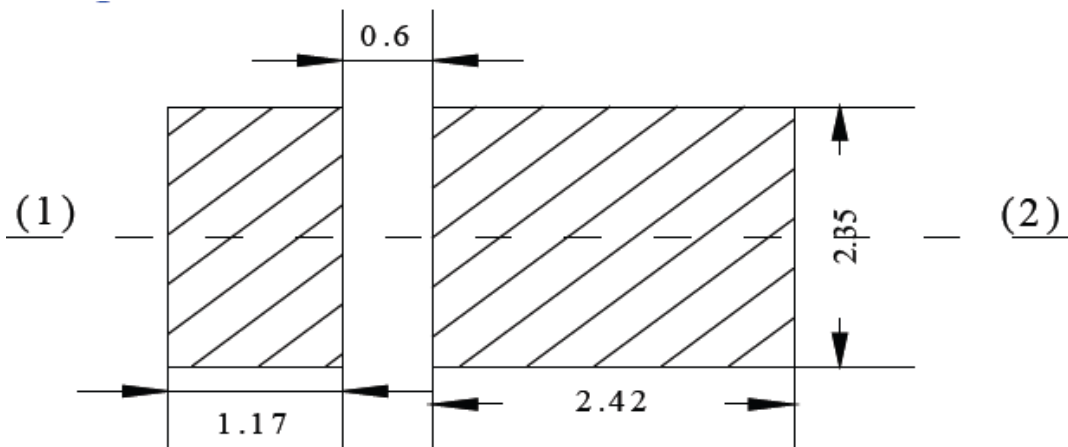
## ESS-2835GP3JC3P9V

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### ANSI 分光标准

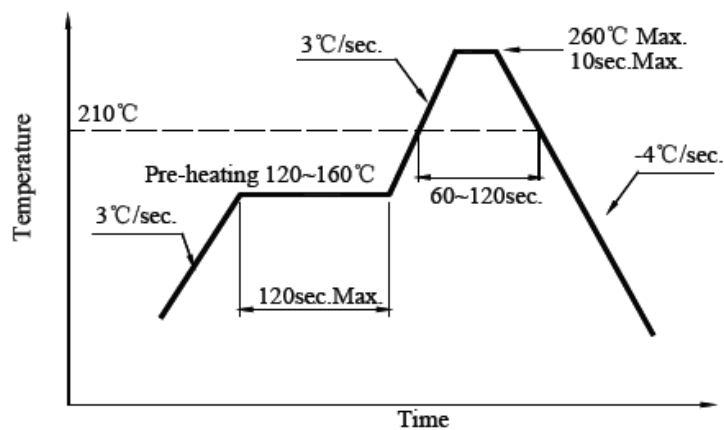
CCT	code	x1	y1	x2	y2	x3	y3	x4	y4	x5	y5	x6	y6
2580-2725K	A27A	0.4822	0.4318	0.4706	0.4125	0.4632	0.4111	0.4687	0.4206	0.4627	0.41927	0.4681	0.4291
	A27B	0.4706	0.4125	0.4632	0.4111	0.4579	0.4019	0.45249	0.4007	0.4477	0.392	0.4596	0.3943
2725-2870K	A27C	0.4681	0.4291	0.4627	0.41927	0.4574	0.4181	0.4524	0.4087	0.4464	0.4071	0.4563	0.426
	A27D	0.4524	0.4087	0.4464	0.4071	0.4371	0.3892	0.4477	0.392	0.45249	0.4007	0.4475	0.3996
2660-2790K	A27M	0.4687	0.4206	0.4579	0.4019	0.4475	0.3996	0.4574	0.4181				
2870-3045K	A30A	0.4579	0.4265	0.4479	0.4075	0.4402	0.4051	0.4448	0.4143	0.438	0.41237	0.4423	0.4215
	A30B	0.4479	0.4075	0.4402	0.4051	0.4358	0.3961	0.42952	0.39436	0.4254	0.3856	0.4385	0.3897
3045-3220K	A30C	0.4423	0.4215	0.438	0.41237	0.4314	0.4105	0.4272	0.4014	0.4201	0.3975	0.4279	0.4156
	A30D	0.4272	0.4014	0.4201	0.3975	0.4127	0.3805	0.4254	0.3856	0.42952	0.39436	0.4232	0.3926
2950-3150K	A30M	0.4448	0.4143	0.4358	0.3961	0.4232	0.3926	0.4314	0.4105				
3220-3465K	A35A	0.4302	0.4168	0.4221	0.3984	0.4154	0.3954	0.419	0.4044	0.41007	0.39993	0.4136	0.4092
3465-3710K	A35B	0.4221	0.3984	0.4154	0.3954	0.4119	0.3871	0.40363	0.383	0.4005	0.3748	0.4144	0.381
	A35C	0.4136	0.4092	0.41007	0.39993	0.4022	0.3959	0.3993	0.3875	0.3922	0.3837	0.3976	0.4005
	A35D	0.3993	0.3875	0.3922	0.3837	0.3871	0.3677	0.4005	0.3748	0.40363	0.383	0.3965	0.3794
3325-3605K	A35M	0.419	0.4044	0.4119	0.3871	0.3965	0.3794	0.4022	0.3959				
3710-3985K	A40A	0.4009	0.4045	0.3944	0.385	0.3882	0.3814	0.3915	0.3922	0.384	0.3875	0.3863	0.3958
	A40B	0.3944	0.385	0.3882	0.3814	0.3865	0.3761	0.37961	0.37189	0.3762	0.3596	0.3884	0.3666
3985-4260K	A40C	0.3863	0.3958	0.384	0.3875	0.3768	0.383	0.3743	0.3728	0.368	0.3686	0.3719	0.3862
	A40D	0.3743	0.3728	0.368	0.3686	0.3644	0.3521	0.3762	0.3596	0.37961	0.37189	0.3731	0.3679
3830-4130K	A40M	0.3915	0.3922	0.3865	0.3761	0.3731	0.3679	0.3768	0.383				
4260-4500K	A45A	0.3735	0.3874	0.3701	0.3721	0.3667	0.3698	0.3682	0.3772	0.36211	0.37273	0.3634	0.3802
	A45B	0.3701	0.3721	0.3667	0.3698	0.3651	0.3626	0.35969	0.35866	0.3585	0.3519	0.3668	0.3576
4500-4745K	A45C	0.3634	0.3802	0.36211	0.37273	0.3569	0.3689	0.3559	0.3619	0.3528	0.3595	0.3546	0.3734
	A45D	0.3559	0.3619	0.3528	0.3595	0.351	0.3463	0.3585	0.3519	0.35969	0.35866	0.3548	0.3551
4350-4650K	A45M	0.3682	0.3772	0.3651	0.3626	0.3548	0.3551	0.3569	0.3689				
4745-5028K	A50A	0.3565	0.377	0.3539	0.3584	0.3502	0.3556	0.3516	0.3668	0.34574	0.36243	0.3462	0.3692
	A50B	0.3539	0.3584	0.3502	0.3556	0.3499	0.3534	0.34485	0.34933	0.344	0.3391	0.3521	0.3452
5028-5311K	A50C	0.3462	0.3692	0.33941	0.36323	0.3391	0.3568	0.3386	0.3464	0.3358	0.344	0.3363	0.3605
	A50D	0.3386	0.3464	0.3358	0.344	0.3355	0.3322	0.344	0.3391	0.34485	0.34933	0.3385	0.3443
4820-5236K	A50M	0.3516	0.3668	0.3499	0.3534	0.3385	0.3443	0.3391	0.3568				
5410-5920K	A57M	0.3346	0.3528	0.3343	0.3407	0.3245	0.3328	0.3244	0.3445				
5310-5665K	A57A	0.3379	0.3619	0.3373	0.3473	0.3344	0.3447	0.3346	0.3528	0.3291	0.34843	0.3291	0.3543
	A57B	0.3373	0.3473	0.3344	0.3447	0.3343	0.3407	0.3291	0.33657	0.3291	0.327	0.3368	0.3333
5665-6020K	A57C	0.3291	0.3543	0.3291	0.34843	0.3244	0.3445	0.3245	0.3367	0.3216	0.3337	0.321	0.347
	A57D	0.3245	0.3367	0.3216	0.3337	0.3222	0.321	0.3291	0.327	0.3291	0.33657	0.3245	0.3328
5410-5920K	A57M	0.3346	0.3528	0.3343	0.3407	0.3245	0.3328	0.3244	0.3445				
6020-6530K	A65A	0.3217	0.3498	0.3221	0.3381	0.3177	0.3335	0.3171	0.3389	0.31156	0.33331	0.3108	0.3386
	A65B	0.3221	0.3381	0.3177	0.3335	0.3182	0.3282	0.31872	0.32312	0.3138	0.3182	0.3226	0.327
6530-7040K	A65C	0.3108	0.3386	0.31156	0.33331	0.3067	0.3284	0.3076	0.3235	0.3048	0.3206	0.3027	0.3304
	A65D	0.3076	0.3235	0.3048	0.3206	0.3067	0.3113	0.3138	0.3182	0.31304	0.32309	0.3085	0.3186
6220-6840K	A65M	0.3171	0.3389	0.3182	0.3282	0.3085	0.3186	0.3067	0.3284				

※ Soldering Pad Dimensions



※ Soldering Conditions (Maximum allowable soldering conditions)

Reflow soldering profile  
<Pb-free solder>



- Reflow soldering should not be done more than two times.
- Do not stress its resin while soldering.
- After soldering, do not warp the circuit board.
- Pay attention to electrostatic (ESD).



※ Package Tape Specifications: (4000 pcs/Reel)

