

品番 LW822-012(T)

■概要 SUMMARY

LW822-012(T)は高輝度InGaNと蛍光体を適用した電球色発光ダイオードです。3素子を並列に配置し超高出力です。
 LW822-012(T) is warm white LED that consists of high brightness InGaN chip and phosphor. 3 chip type.

■備考 REMARKS

Pbフリー対応 Pb Free

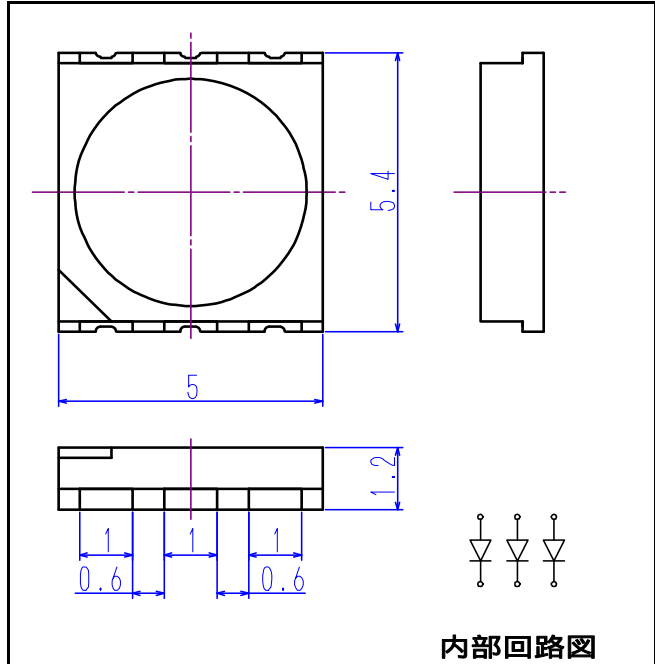
■用途例 APPLICATIONS

照明 Lighting
 イルミネーション Illumination
 アミューズメント Amusement

■特徴 FEATURES

超高輝度 High Brightness
 小型 Small Package
 表面実装 SMD
 電球色 Warm white

■外形寸法 DIMENSIONS(Unit:mm)



■最大定格 MAXIMUM RATINGS Ta=25°C

Item	Symbol	Data	Unit
逆方向電圧 Reverse Voltage	VR	5	V
直流順電流 Direct Forward Current	IF	450(150*3chip)	mA
許容損失 Power Dissipation	PD	1575	mW
動作温度 Operating Temp.	Topr	-40~+85	°C
保存温度 Storage Temp.	Tstg	-40~+100	°C
半田付温度 Soldering Temp.	Tsol	260	°C

■電氣的・光学的特性 ELECTRO-OPTICAL CHARACTERISTICS Ta=25°C

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit.
順電圧 Forward Voltage	VF	IF=240mA(80mA*3chip)	2.7	3.05	3.5	V
色度 Illuminance	x	IF=240mA(80mA*3chip)	0.3028	0.33	0.3572	-
			0.3046	0.34	0.3891	-
光度 Light Intensity	IV	IF=240mA(80mA*3chip)	21.5	25.3	-	cd
全光束 Luminous flux	Lm	IF=240mA(80mA*3chip)	-	(70.5)	-	lm
平均演色性評価数 General Color Rendering Index	Ra	IF=240mA(80mA*3chip)	-	(68)	-	-
逆電流 Reverse Current	IR	VR=5V	-	-	10	uA
半値角 Half Angle	2θ 1/2	IF=240mA(80mA*3chip)	-	120	-	deg
熱抵抗 Thermal Resistance ※	Rjc	-	-	20	-	°C/W

※ LED Chipジャンクション部から 半田接合部温度測定ポイント(Cathode端子④)までの熱抵抗 ()は参考値です。
 Thermal Resistance from LED junction to the measurement point of solder joint temperature.(Cathode Terminal④)

■Ranks

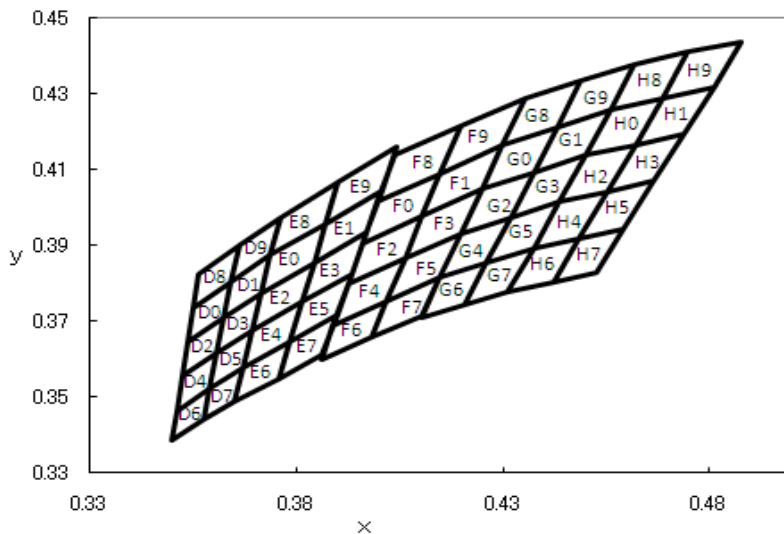
IV	LL: 21.5~23.5	LM: 23.5~26.0	MM: 26.0~28.5	MN: 28.5~31.0				
VF	1: 2.7~2.8	2: 2.8~2.9	3: 2.9~3.0	4: 3.0~3.1	5: 3.1~3.2	6: 3.2~3.3	7: 3.3~3.4	8: 3.4~3.5

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The contents of this data sheet are subject to change without advance notice for the purpose of improvement. When using this product, would you please refer to the latest specifications.

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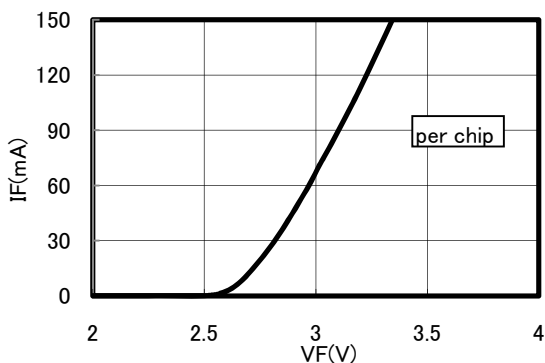
■色度ランク分類 Chromaticity Coordinates Rank



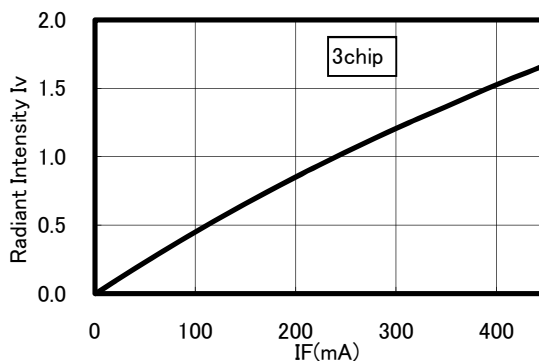
	spec			spec			spec			spec			spec			
	x	y		x	y		x	y		x	y		x	y		
D0	0.3548	0.3736	D1	0.3641	0.3804	D2	0.3536	0.3646	D3	0.3625	0.3711	D4	0.3523	0.3555		
	0.3536	0.3646		0.3625	0.3711		0.3523	0.3555								
	0.3625	0.3711		0.3641	0.3804		0.3608	0.3616		0.3511	0.3465					
	0.3641	0.3804		0.3625	0.3711		0.3692	0.3677		0.3590	0.3521					
D5	0.3608	0.3616	D6	0.3511	0.3465	D7	0.3590	0.3521	D8	0.3562	0.3826	D9	0.3661	0.3900		
	0.3590	0.3521		0.3498	0.3385		0.3575	0.3441		0.3548	0.3736		0.3641	0.3804	0.3661	0.3900
	0.3670	0.3578		0.3575	0.3441		0.3650	0.3489		0.3641	0.3804		0.3661	0.3900	0.3736	0.3874
	0.3692	0.3677		0.3590	0.3521		0.3670	0.3578		0.3661	0.3900		0.3661	0.3900	0.3760	0.3974
E0	0.3736	0.3874	E1	0.3869	0.3958	E2	0.3714	0.3775	E3	0.3842	0.3855	E4	0.3692	0.3677		
	0.3714	0.3775		0.3842	0.3855		0.3692	0.3677		0.3813	0.3751		0.3842	0.3855	0.3670	0.3578
	0.3842	0.3855		0.3970	0.3935		0.3813	0.3751		0.3934	0.3825		0.3970	0.3935	0.3783	0.3646
	0.3869	0.3958		0.4006	0.4044		0.3842	0.3855		0.3970	0.3935		0.3813	0.3751	0.3813	0.3751
E5	0.3813	0.3751	E6	0.3670	0.3578	E7	0.3783	0.3646	E8	0.3760	0.3974	E9	0.3902	0.4067		
	0.3783	0.3646		0.3650	0.3489		0.3758	0.3550		0.3736	0.3874		0.3760	0.3974	0.3869	0.3958
	0.3898	0.3716		0.3758	0.3550		0.3863	0.3610		0.3869	0.3958		0.3902	0.4067	0.4006	0.4044
	0.3934	0.3825		0.3783	0.3646		0.3898	0.3716		0.3902	0.4067		0.4044	0.4160	0.4044	0.4160
F0	0.3996	0.4015	F1	0.4146	0.4089	F2	0.3960	0.3907	F3	0.4104	0.3978	F4	0.3925	0.3798		
	0.3960	0.3907		0.4104	0.3978		0.3925	0.3798		0.4062	0.3865		0.4104	0.3978	0.3889	0.3690
	0.4104	0.3978		0.4248	0.4048		0.4062	0.3865		0.4198	0.3931		0.4248	0.4048	0.4017	0.3751
	0.4146	0.4089		0.4299	0.4165		0.4104	0.3978		0.4248	0.4048		0.4062	0.3865	0.4062	0.3865
F5	0.4062	0.3865	F6	0.3889	0.3690	F7	0.4017	0.3751	F8	0.4037	0.4140	F9	0.4197	0.4217		
	0.4017	0.3751		0.3860	0.3600		0.3983	0.3660		0.3996	0.4015		0.4037	0.4140	0.4146	0.4089
	0.4147	0.3814		0.3983	0.3660		0.4104	0.3715		0.4146	0.4089		0.4197	0.4217	0.4299	0.4165
	0.4198	0.3931		0.4017	0.3751		0.4147	0.3814		0.4197	0.4217		0.4197	0.4217	0.4354	0.4288
G0	0.4299	0.4165	G1	0.4430	0.4212	G2	0.4248	0.4048	G3	0.4374	0.4093	G4	0.4198	0.3931		
	0.4248	0.4048		0.4374	0.4093		0.4198	0.3931		0.4317	0.3973		0.4374	0.4093	0.4147	0.3814
	0.4374	0.4093		0.4499	0.4138		0.4317	0.3973		0.4436	0.4015		0.4317	0.3973	0.4259	0.3853
	0.4430	0.4212		0.4562	0.4260		0.4374	0.4093		0.4499	0.4138		0.4499	0.4138	0.4317	0.3973
G5	0.4317	0.3973	G6	0.4147	0.3814	G7	0.4259	0.3853	G8	0.4354	0.4288	G9	0.4487	0.4333		
	0.4259	0.3853		0.4102	0.3710		0.4207	0.3744		0.4299	0.4165		0.4354	0.4288	0.4487	0.4333
	0.4373	0.3893		0.4207	0.3744		0.4312	0.3778		0.4430	0.4212		0.4299	0.4165	0.4430	0.4212
	0.4436	0.4015		0.4259	0.3853		0.4373	0.3893		0.4487	0.4333		0.4436	0.4015	0.4562	0.4260
H0	0.4562	0.4260	H1	0.4687	0.4289	H2	0.4499	0.4138	H3	0.4620	0.4166	H4	0.4436	0.4015		
	0.4499	0.4138		0.4620	0.4166		0.4436	0.4015		0.4551	0.4042		0.4620	0.4166	0.4483	0.3919
	0.4620	0.4166		0.4740	0.4194		0.4551	0.4042		0.4666	0.4069		0.4740	0.4194	0.4551	0.4042
	0.4687	0.4289		0.4810	0.4319		0.4620	0.4166		0.4740	0.4194		0.4687	0.4289	0.4551	0.4042
H5	0.4551	0.4042	H6	0.4373	0.3893	H7	0.4483	0.3919	H8	0.4619	0.4378	H9	0.4747	0.4410		
	0.4483	0.3919		0.4312	0.3778		0.4422	0.3805		0.4562	0.4260		0.4619	0.4378	0.4747	0.4410
	0.4593	0.3944		0.4422	0.3805		0.4527	0.3830		0.4687	0.4289		0.4562	0.4260	0.4687	0.4289
	0.4666	0.4069		0.4483	0.3919		0.4593	0.3944		0.4747	0.4410		0.4687	0.4289	0.4810	0.4319

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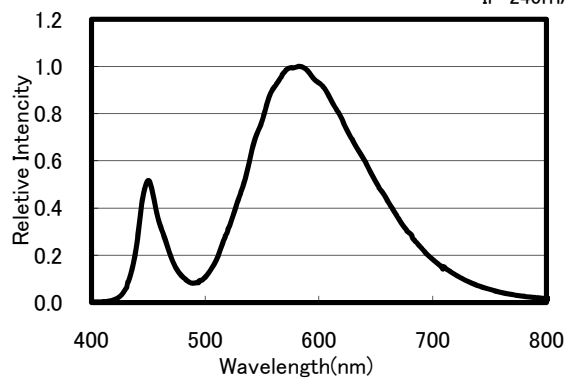
Forward current vs. Forward voltage (Ta=25°C)



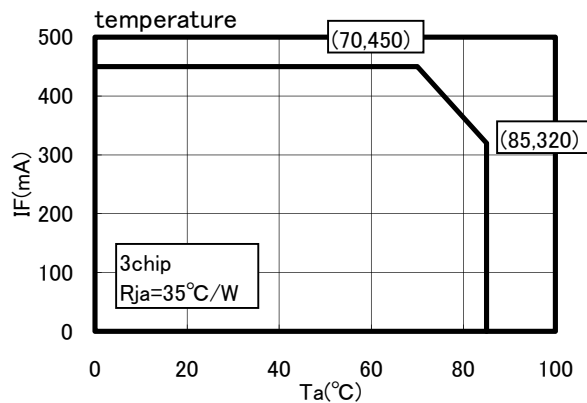
Radiant Intensity vs. Forward current (Ta=25°C)



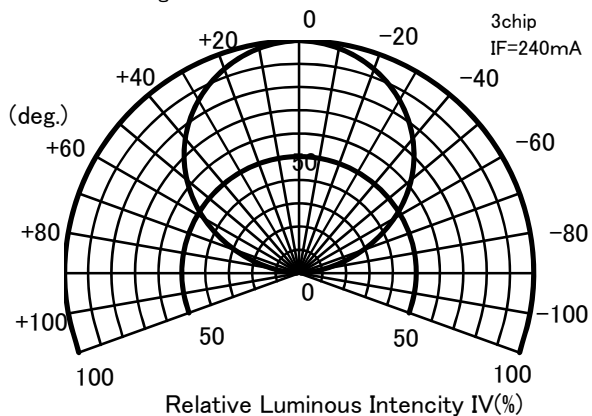
Relative intensity vs. Wavelength (Ta=25°C)
3chip
IF=240mA



Forward current vs. Ambient temperature



Radiation Diagram (Ta=25°C)
3chip
IF=240mA



■ 推奨半田パターン
Recommended Soldering Pattern

