One of the best Lm/W, Lm/$ in Mid-Power LED
HIGH-POWER CERAMIC PACKAGING LED – 3535 RGBW SERIES

Product Brief

FEATURES AND BENEFITS
HIGH LUMEN OUTPUT AND EFFICACY
DESIGNED FOR HIGH CURRENT OPERATION
LOW THERMAL RESISTANCE
CCT RANGE 5500-7500K
PB-FREE REFLOW SOLDERING APPLICATION

KEY APPLICATIONS
INDOOR LIGHTING
OUTDOOR LIGHTING
AUTOMOTIVE
ARCHITECTURAL LIGHTING
INDUSTRIAL LIGHTING (HIGH/LOW BAY)
HOME APPLIANCE

Model No.	Color	WD (nm)/CCT	
		Min.	Max.
SE-SMD3535-RGBW71	RED	620	630
	GREEN	520	530
	BLUE	460	470
	WHITE	5500	7500

Table 2. Electro Optical Characteristics, IF = 150mA , Ta = 25℃, RH60%

Color	CCT (K)	Typical Luminous Flux (IF=150mA)	Wavelength (nm)	
			Wd (Min.)	Wd (Max.)
RED	-	18	620	630
GREEN	-	30	520	530
BLUE	-	8,5	460	470
WHITE	6500	34	-	-

Tolerance of measurements of the Luminous Flux is ±7%(LM±7%）
Ra measurement tolerance is ±2
Correlated Color Temperature is derived from the CIE 1931 Chromaticity diagram.
The lumen table is only for reference (LM)
Ta = 25℃, RH60%

Table 3. Electro Optical Characteristics, IF = 150mA , Ta = 25℃, RH60%

Item	Symbol	Color	Value			Unit	Test Condition
			Min	Typ	Max		
Forward Voltage	VF	RED	1,8	2,0	2,4	V	IF=150mA
		GREEN	2,8	3,0	3,4		
		BLUE	2,8	3,0	3,4		
		WHITE	2,8	3,0	3,4		
Reverse Current	IR	-	-	-	2	μA	VR=5V
Electrostatic Discharge	ESD	-	1000	-	-	V	-

Tolerance : VF :±0.1V
Ta = 25℃, RH60%

Table 3. Electro Optical Characteristics, IF = 150mA , Ta = 25℃, RH60%

Item	Symbol	Color	Value			Unit	Test Condition
			Min	Typ	Max		
Thermal Resistance	(Rth j-sp)	RED	-	10	-	°C/W	IF=150mA
		GREEN	-	16	-		
		BLUE	-	10	-		
		WHITE	-	11	-		
View Angle	20 1/2	-	-	140	2	°	IF=150mA

2Θ1/2 is the off-axis where the luminous intensity is 1/2 of the peak intensity
Thermal resistance : RthJS (Junction / solder)
Ta = 25℃, RH60%

Table 4. Absolute Maximum Ratings, Ta = 25℃, RH60%

Item	Symbol	Absolute Maximum Ratings	Unit
Forward Current	IF	250	mA
Pulse Forward Current	IFP	500	mA
Power Dissipation	PD	3150	mW
Reverse Voltage	VR	5	V
Operating Temperature	Topr	-40～+100	℃
Storage Temperature	Tstg	-40～+100	℃
Junction Temperature	Tj	125	℃
Soldering Temperature	Tsld	230°C or 260°C for 10sec	

IFP condition with Pulse: Width≤100μs Duty cycle≤1/10
LED's properties might be different from suggested values like above and below tables if operation condition will be exceeded our parameter range. Care is to be taken that power dissipation does not exceed the absolute maximum rating of the product.

Fig 1. Color Spectrum, Ta = 25℃, RH60%

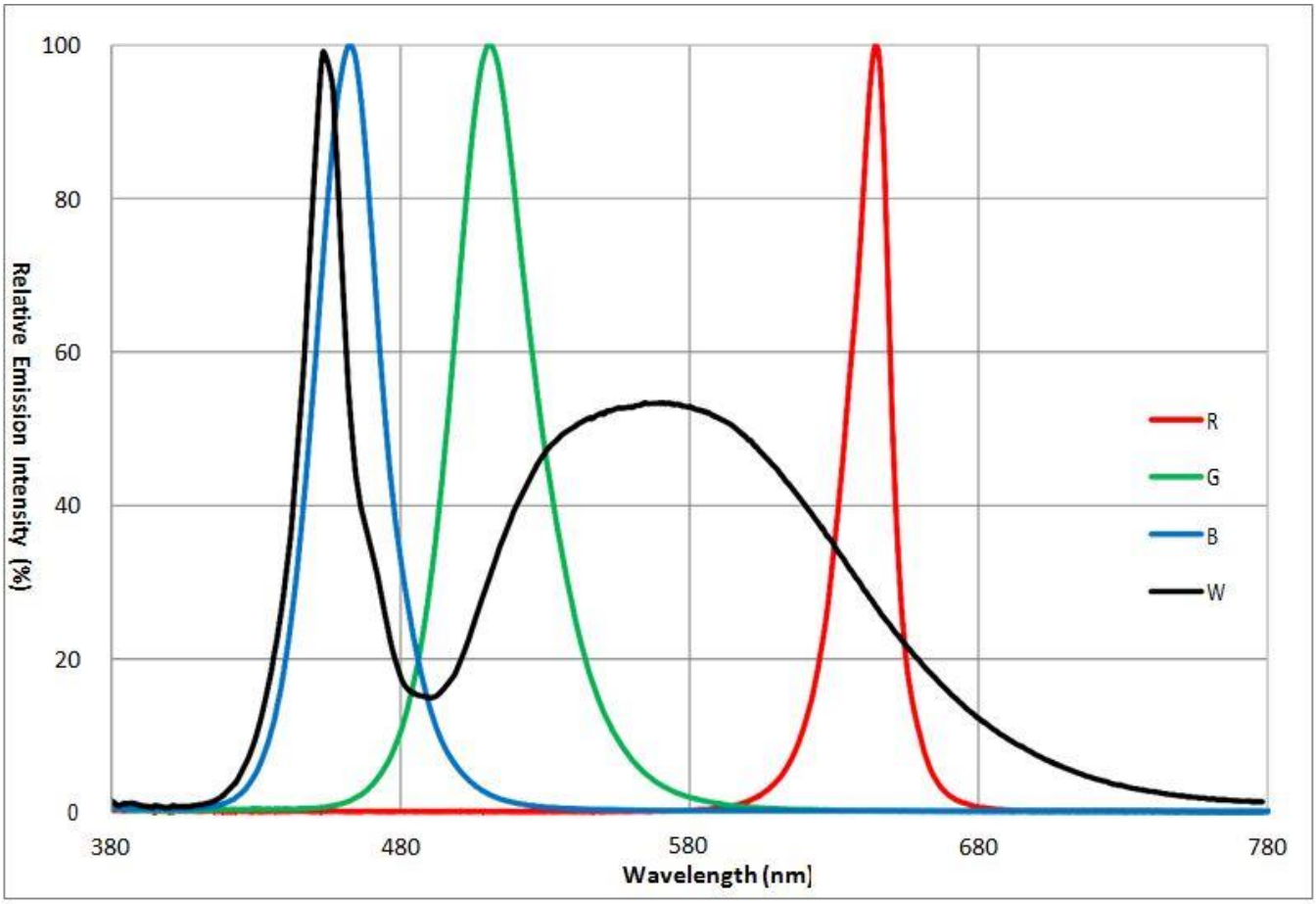


Fig 2. Viewing Angle Distribution, Ta = 25℃, RH60%

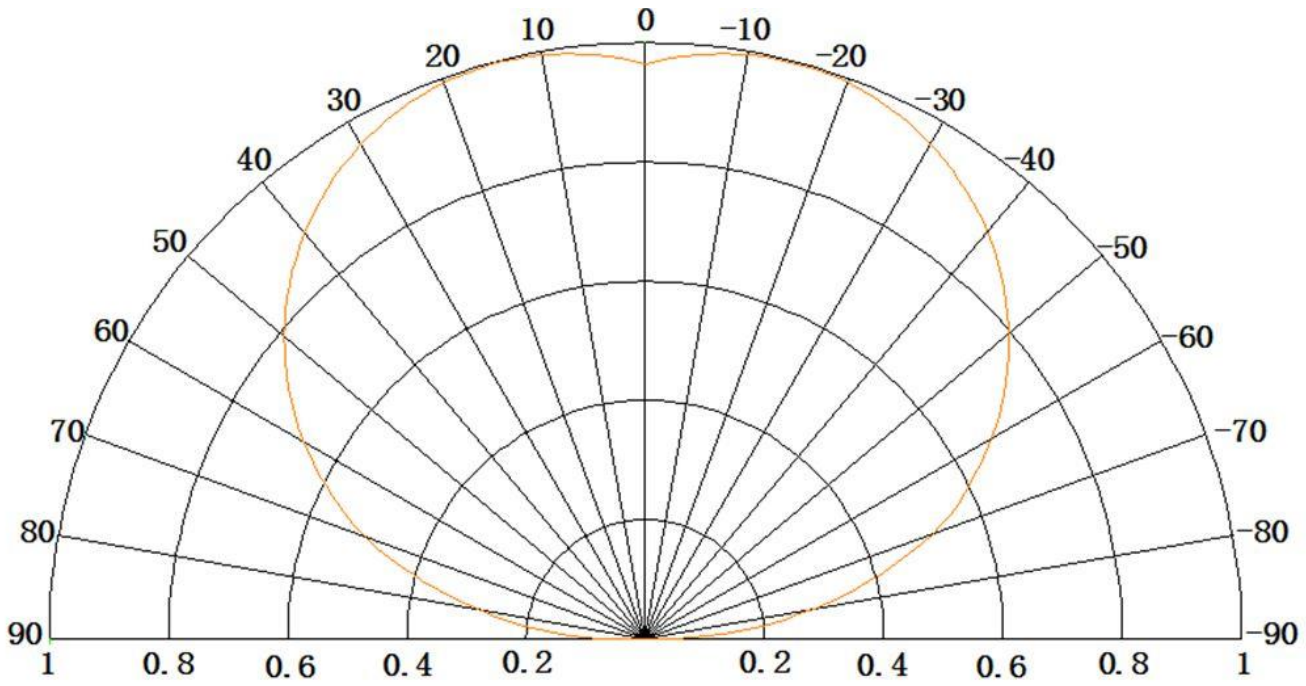


Fig 3. IF- Relative Luminous flux, Ta = 25℃

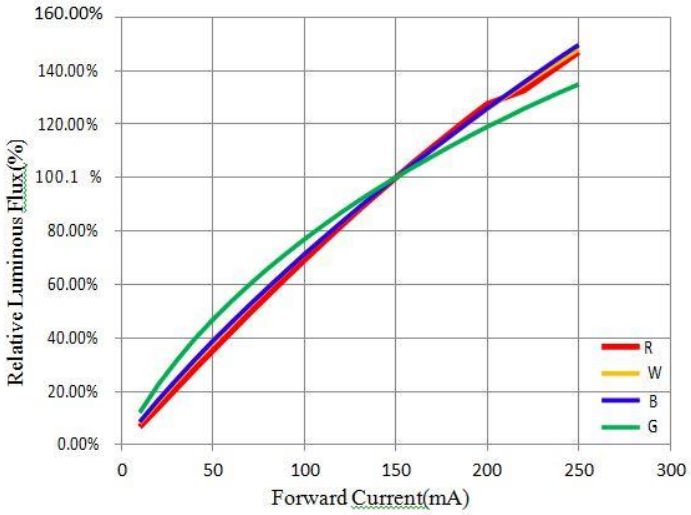


Fig 4. Forward Voltage vs. Forward Current , Ta = 25℃

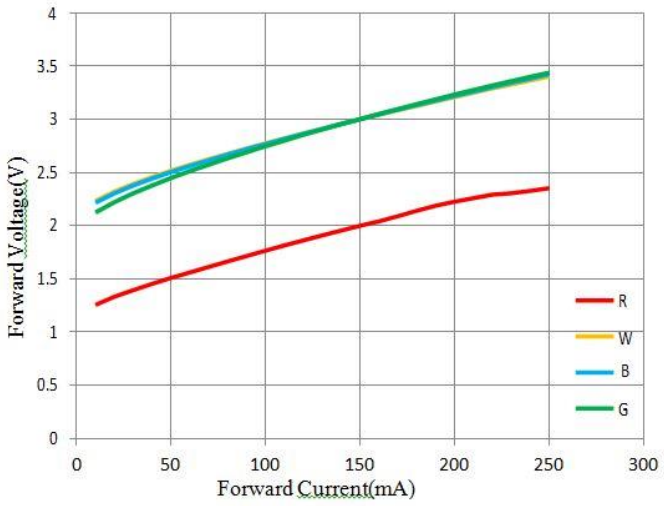


Fig 5. Ta—Relative Luminous flux

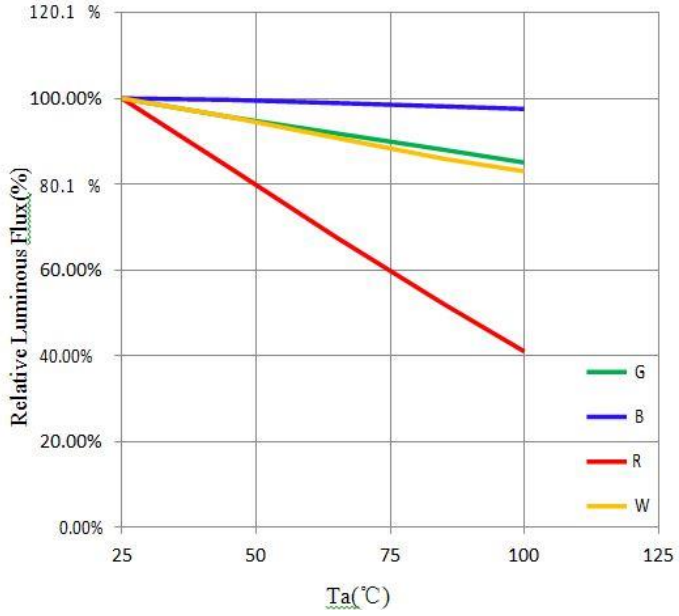


Fig 6. Ta—Forward Voltage

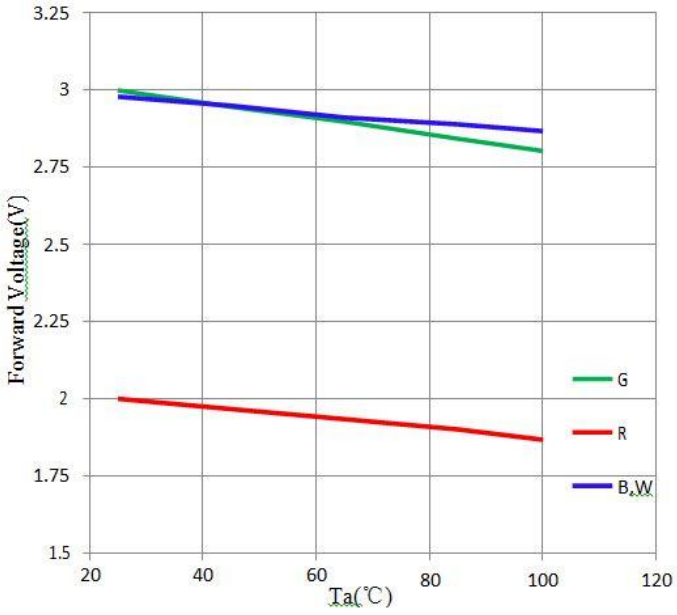
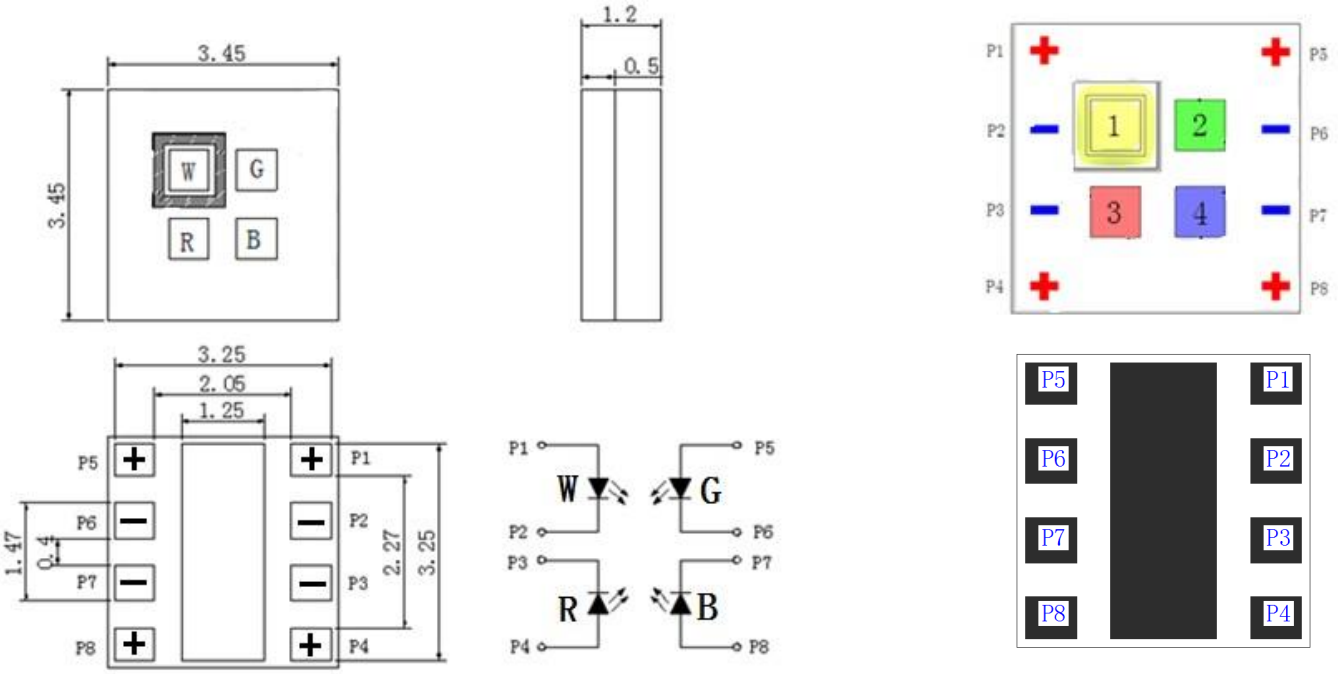


Table 6. Luminous flux and wavelength step, IF = 150mA , Ta = 25℃, RH60%

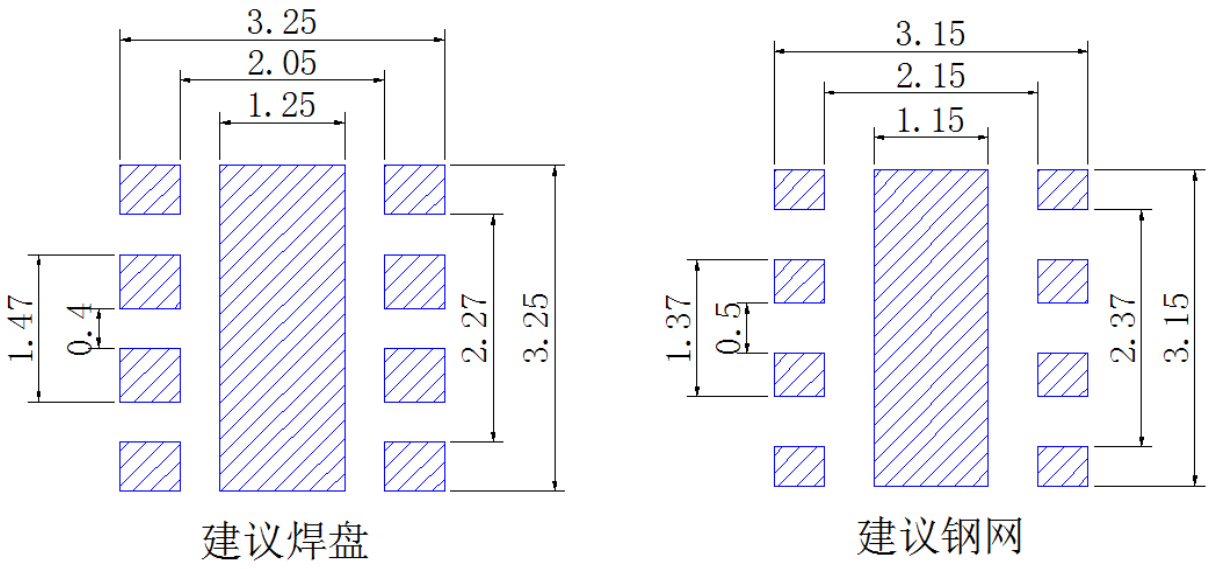
Color Temperature	WPD/CCT				Luminous Flux (IF=150mA）		
	Min	Max	Min	Max	Code	Min	Max
RED	620	630	1.8	2.4	AH	18	22
					AJ	22	26
GREEN	520	530	2.8	3.4	AK	26	30
					AL	30	37
BLUE	460	470	2.8	3.4	AE	8	10
					AF	10	14
WHITE	5500	6500	2.8	3.4	AL	30	37
					AM	37	44
	6500	7500	2.8	3.4	AL	30	37
					AM	37	44

Tolerance of measurements of the Luminous Flux is ±7%
Ra measurement tolerance is ±2.
Correlated Color Temperature is derived from the CIE 1931 Chromaticity diagram
Ta = 25℃, RH60%

Mechanical Dimensions



All dimensions are in millimeters
Scale : 1:1
Undefined tolerance is ±0.2mm



All dimensions are in millimeters.
Scale : 1:1
This drawing without tolerances are for reference only
Undefined tolerance: ±0.10mm