



ABC352819-ATC2

Dual Wavelength SMD Type Emitter

Features

- Top view 3528 package
- Viewing Angle = $\pm 60^\circ$
- Compatible with infrared and vapor phase reflow solder process
- High reliability
- Dual dominant wavelength (A=602nm , B=467nm)
- RoHS compliance

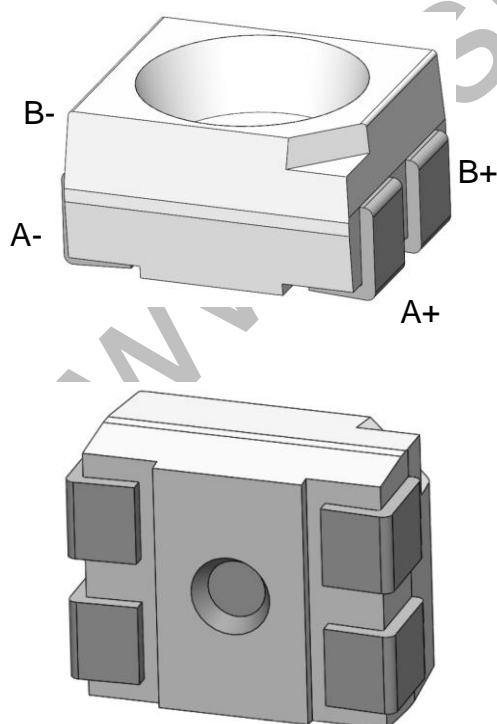
Applications

- Optical indicator.
- Switch and Symbol Display.

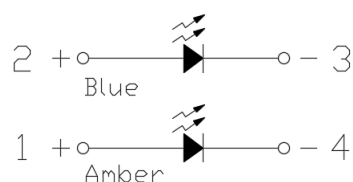
Description

The ABC352819-ATC2 is a double LED housed in a miniature SMD package. The device has a dominant wavelength of 602nm and 467nm LED.

Package Outline



Schematic



**Absolute Maximum Rating at 25°C**

Symbol	Parameters		Ratings	Units	Notes
I _F	Continuous Forward Current	A	25	mA	
		B	25		
I _{FP}	Peak Forward Current	A	60	mA	1
		B	60		
V _R	Reverse Voltage		5	V	
T _{opr}	Operating Temperature		-40 ~ +85	°C	
T _{stg}	Storage Temperature		-40 ~ +100	°C	
T _{sol}	Soldering Temperature		260	°C	2
P _D	Power Dissipation at(or below) 25°C Free Air Temperature	A	60	mW	
		B	95		

Electro-Optical Characteristics *TA = 25°C (unless otherwise specified)***Optical Characteristics (Amber)**

Symbol	Parameters	Test Conditions	Min	Typ	Max	Units	Notes
I _v	Luminous Intensity	I _F =20mA	680	-	750	mcd	3
λ _d	Dominant Wavelength	I _F =20mA	600	-	605	nm	4
θ _{1/2}	Angle of Half Intensity	I _F =20mA	-	±60	-	deg	

Electrical Characteristics

Symbol	Parameters	Test Conditions	Min	Typ	Max	Units	Notes
V _F	Forward Voltage	I _F =20mA	1.8	-	2.4	V	5
I _R	Reverse Current	V _R =5V	-	-	10	μA	

**Optical Characteristics (Blue)**

Symbol	Parameters	Test Conditions	Min	Typ	Max	Units	Notes
I _v	Luminous Intensity	I _F =20mA	260	-	320	mcd	3
λ _d	Dominant Wavelength	I _F =20mA	465	-	470	nm	4
θ _{1/2}	Angle of Half Intensity	I _F =20mA	-	±60	-	deg	

Electrical Characteristics

Symbol	Parameters	Test Conditions	Min	Typ	Max	Units	Notes
V _F	Forward Voltage	I _F =20mA	2.8	-	3.4	V	5
I _R	Reverse Current	V _R =5V	-	-	10	μA	

Notes:

1. I_{FP} Conditions--Pulse Width ≤ 100μs and Duty ≤ 10%.
2. Soldering time ≤ 10 seconds.



Typical Characteristic Curves

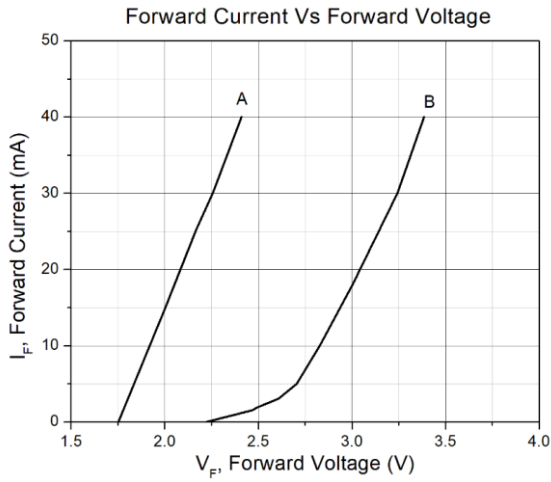


Figure 1

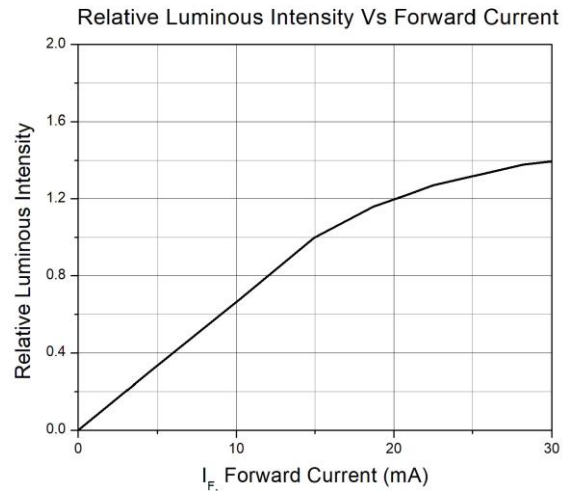


Figure 2

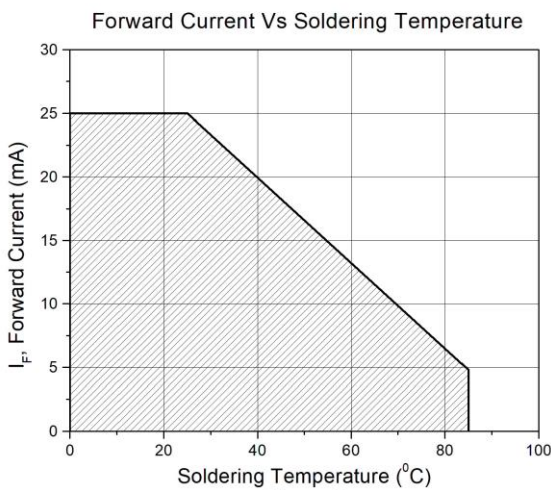


Figure 3

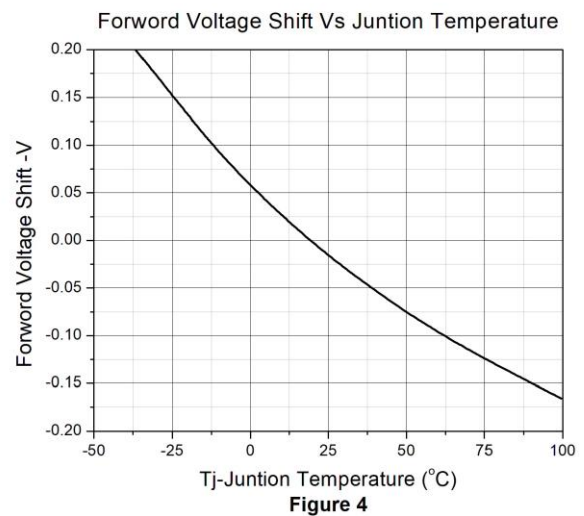


Figure 4

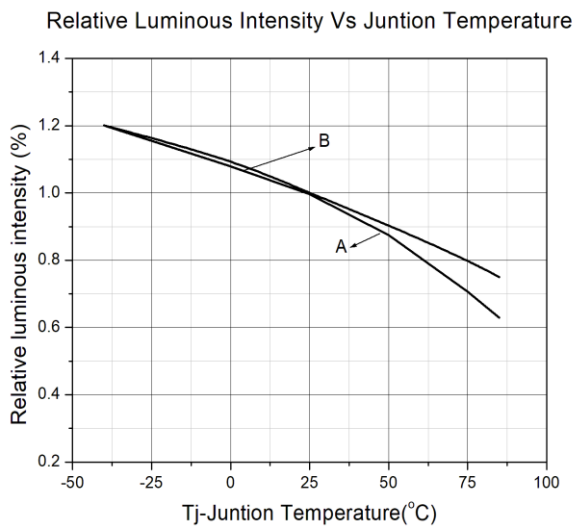


Figure 5

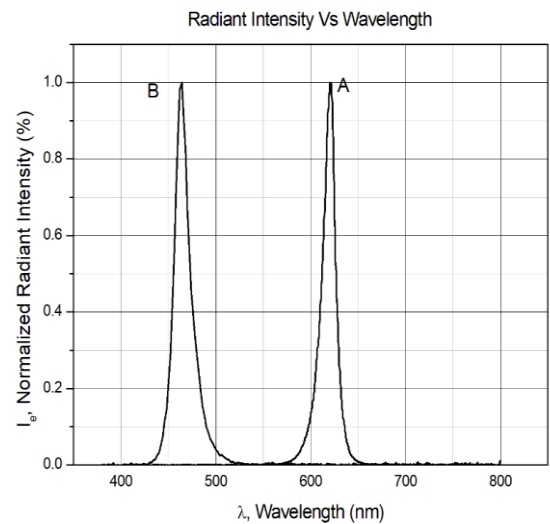


Figure 6



Typical Characteristic Curves

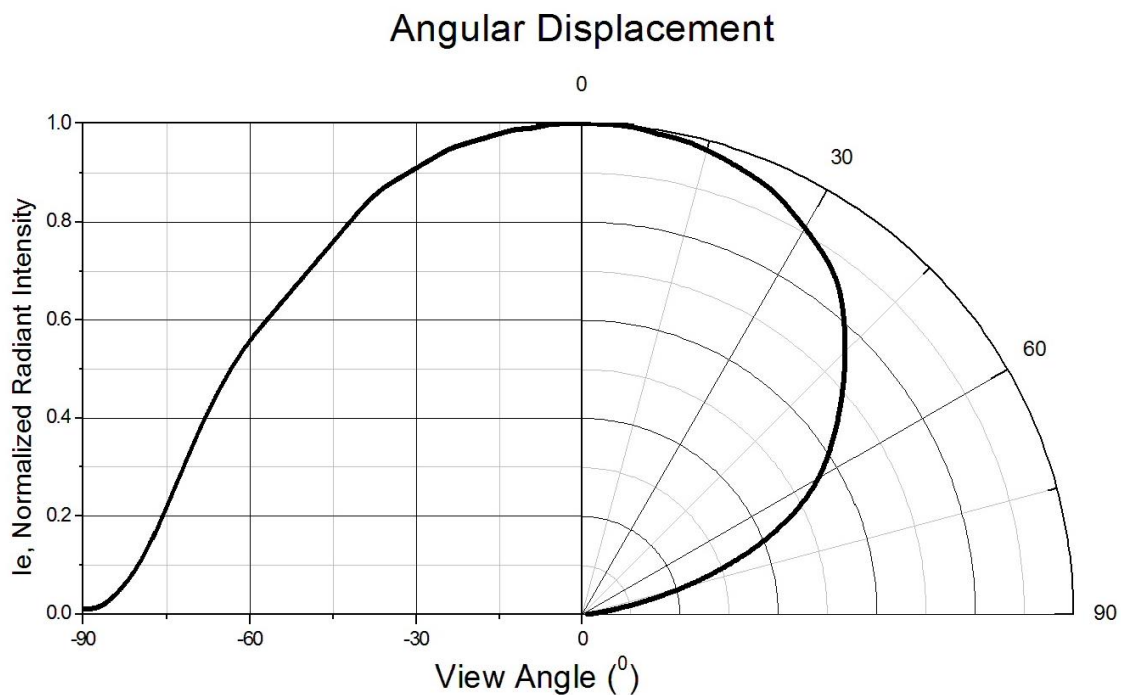


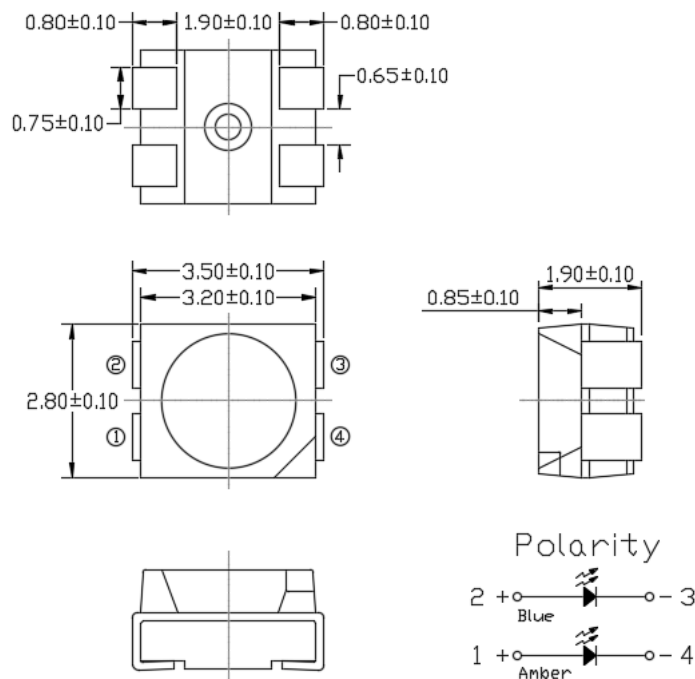
Figure 7



ABC352819-ATC2

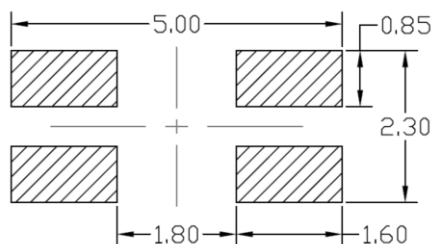
Dual Wavelength SMD Type Emitter

Package Dimension *All dimensions are in mm, unless otherwise stated*



Note: Tolerance unless mentioned is ±0.1mm.

Recommended Soldering Mask *All dimensions are in mm, unless otherwise stated*



Note: Tolerance unless mentioned is ±0.1mm.

Ordering Information

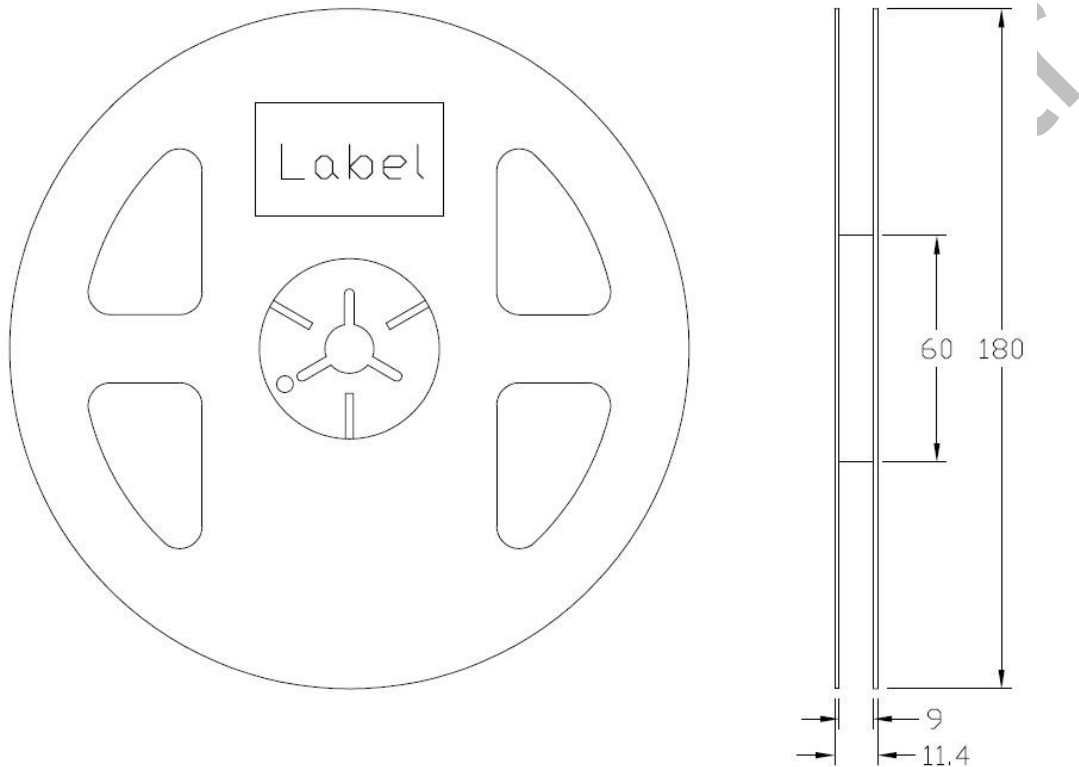
Part Number	Description	Quantity
ABC352819-ATC2	Tape & Reel	3000 pcs



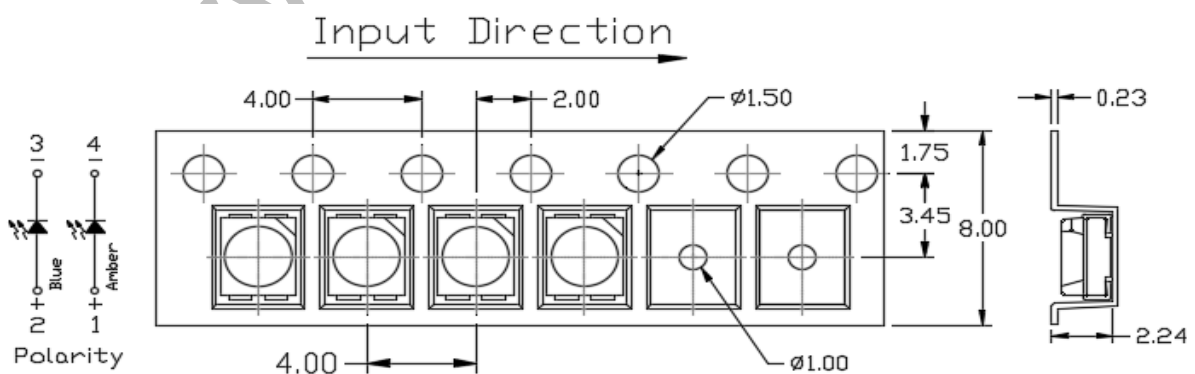
ABC352819-ATC2

Dual Wavelength SMD Type Emitter

Reel Dimension *All dimensions are in mm, unless otherwise stated*



Tape Dimension *All dimensions are in mm, unless otherwise stated*



Note: Tolerance unless mentioned is ± 0.1 mm.



Label Form Specification



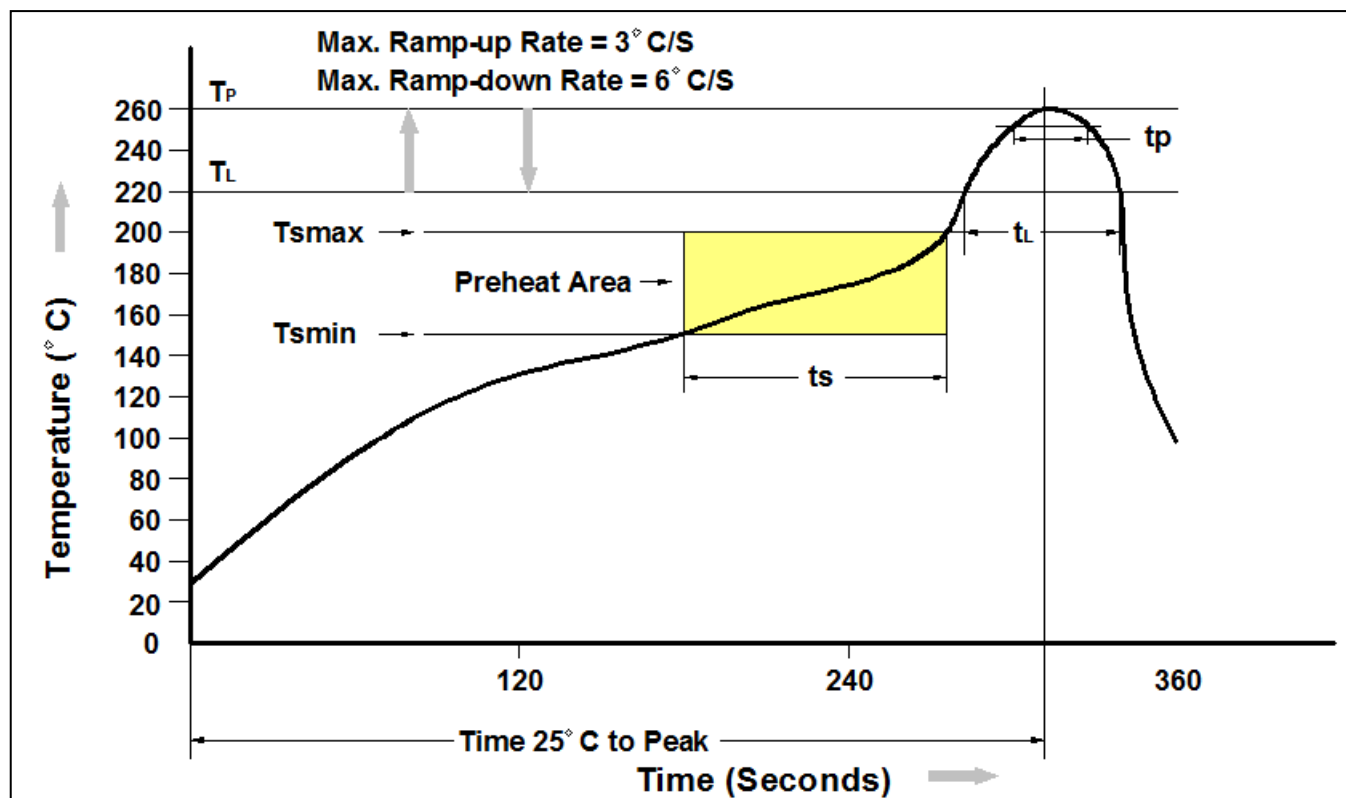
CPN : Customer Part Number
 Part no: CTM Production Number
 Serial no: Production Number
 Lot no: Lot number
 Q'ty: Packing Quantity
 Date Code: Manufacture Date
 IV : Bin Code of Luminous Intensity
 WD : Bin Code of Dominant Wavelength
 VF : Bin Code of Forward Voltage
 MADE IN CHINA: Production Place

Storage Condition

1. Do not open moisture proof bag before the products are ready to use.
2. The moisture barrier bag should be stored at 30°C and 90%R.H. max. before opening.
Shelf life of non-opened bag is 12 months after the bag sealing date.
3. After opening the moisture barrier bag floor life is 168h at 30°C/60%RH. max. Unused LEDs should be resealed into moisture barrier bag. (Refer to J-STD-020 Standard)
4. If the moisture absorbent material has faded away or the LEDs have exceeded the storage time, baking treatment should be performed using the J-STD-033 Standard conditions.



Reflow Profile



Profile Feature	Pb-Free Assembly Profile
Temperature Min. (Tsmmin)	150°C
Temperature Max. (Tsmmax)	200°C
Time (ts) from (Tsmmin to Tsmmax)	60-120 seconds
Ramp-up Rate (tL to tP)	3°C/second max.
Liquidous Temperature (TL)	217°C
Time (tL) Maintained Above (TL)	60 – 150 seconds
Peak Body Package Temperature	260°C +0°C / -5°C
Time (tP) within 5°C of 260°C	30 seconds
Ramp-down Rate (TP to TL)	6°C/second max
Time 25°C to Peak Temperature	8 minutes max.



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