



# YC283508-FTA4

## SMD Type Yellow Emitter

### Features

- Top view 2835 package
- Viewing Angle =  $\pm 60^\circ$
- Compatible with infrared and vapor phase reflow solder process
- High reliability
- Ultra bright Yellow
- RoHS compliance

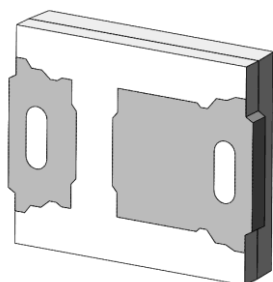
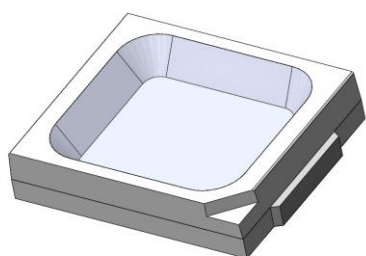
### Applications

- Optical indicator.
- Switch and Symbol Display.

### Description

The YC283508-FTA4 is an AlGaInP Yellow LED housed in a miniature SMD package. The device has a dominant wavelength of 590nm LED.

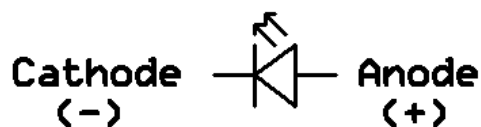
### Package Outline



Cathode

Anode

### Schematic





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### Absolute Maximum Rating at 25°C

Symbol	Parameters	Ratings	Units	Notes
I <sub>F</sub>	Continuous Forward Current	60	mA	
I <sub>FP</sub>	Peak Forward Current	90	mA	1
V <sub>R</sub>	Reverse Voltage	7	V	
T <sub>opr</sub>	Operating Temperature	-40 ~ +85	°C	
T <sub>stg</sub>	Storage Temperature	-40 ~ +100	°C	
T <sub>sol</sub>	Soldering Temperature	260	°C	2
P <sub>D</sub>	Power Dissipation at(or below) 25°C Free Air Temperature	0.2	W	

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

#### Optical Characteristics

Symbol	Parameters	Test Conditions	Min	Typ	Max	Units	Notes
Φ	Luminous Flux	I <sub>F</sub> =60mA	8	-	10	lm	3
λ <sub>d</sub>	Dominant Wavelength	I <sub>F</sub> =60mA	588	-	592	nm	4
θ <sub>1/2</sub>	Angle of Half Intensity	I <sub>F</sub> =60mA	-	±60	-	deg	

#### Electrical Characteristics

Symbol	Parameters	Test Conditions	Min	Typ	Max	Units	Notes
V <sub>F</sub>	Forward Voltage	I <sub>F</sub> =60mA	2.1	-	2.4	V	5
I <sub>R</sub>	Reverse Current	V <sub>R</sub> =7V	-	-	1	μA	

#### Notes:

1. I<sub>FP</sub> Conditions--Pulse Width ≤ 100μs and Duty ≤ 10%.
2. Soldering time ≤ 10 seconds.
3. Tolerance of Luminous Flux: ±10%
4. Tolerance of Dominant Wavelength: ±1nm.
5. Tolerance of Forward Voltage: ±0.05V.



## Typical Characteristic Curves

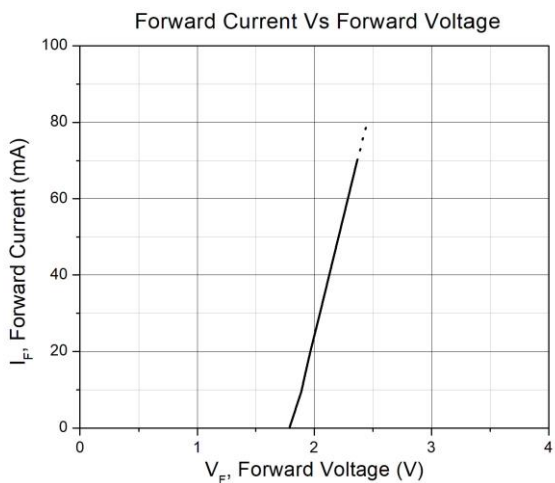


Figure 1

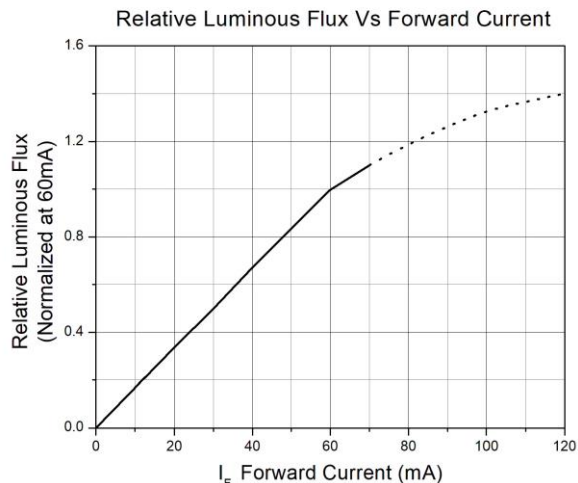


Figure 2

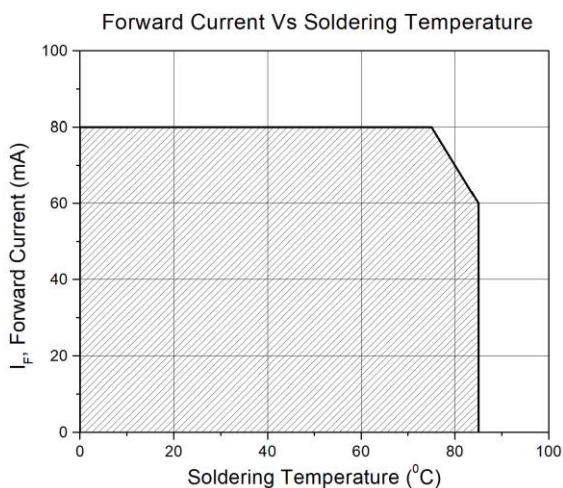


Figure 3

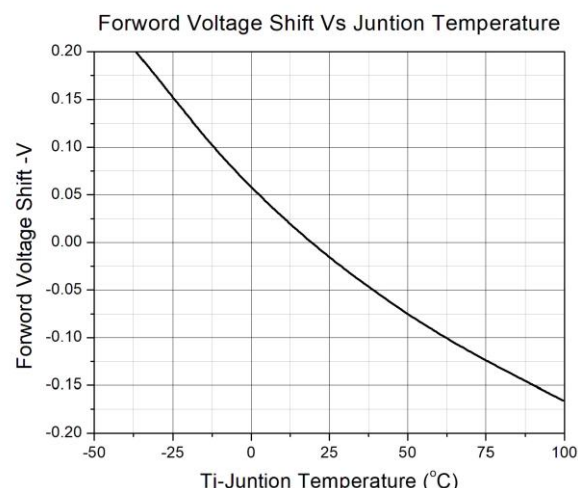


Figure 4

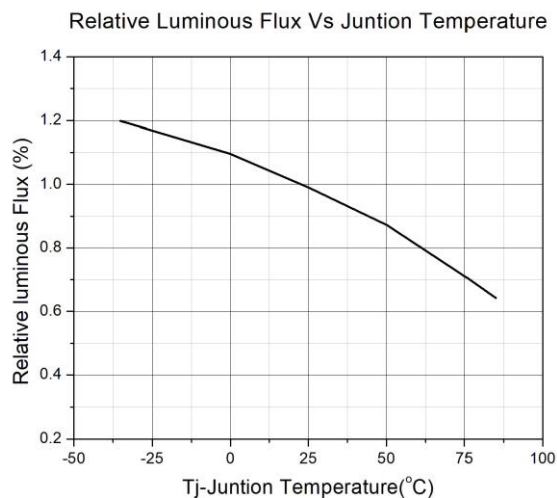


Figure 5

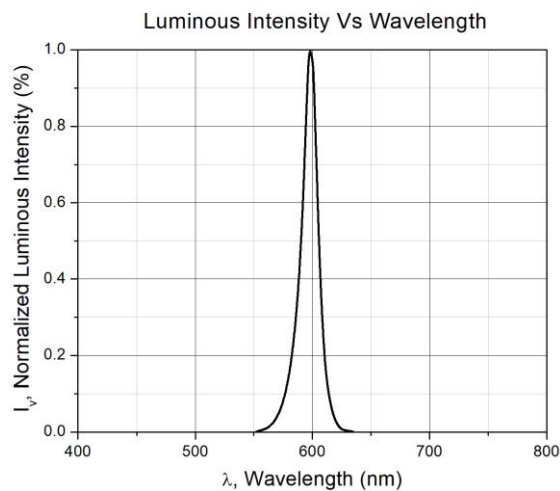


Figure 6



### Typical Characteristic Curves

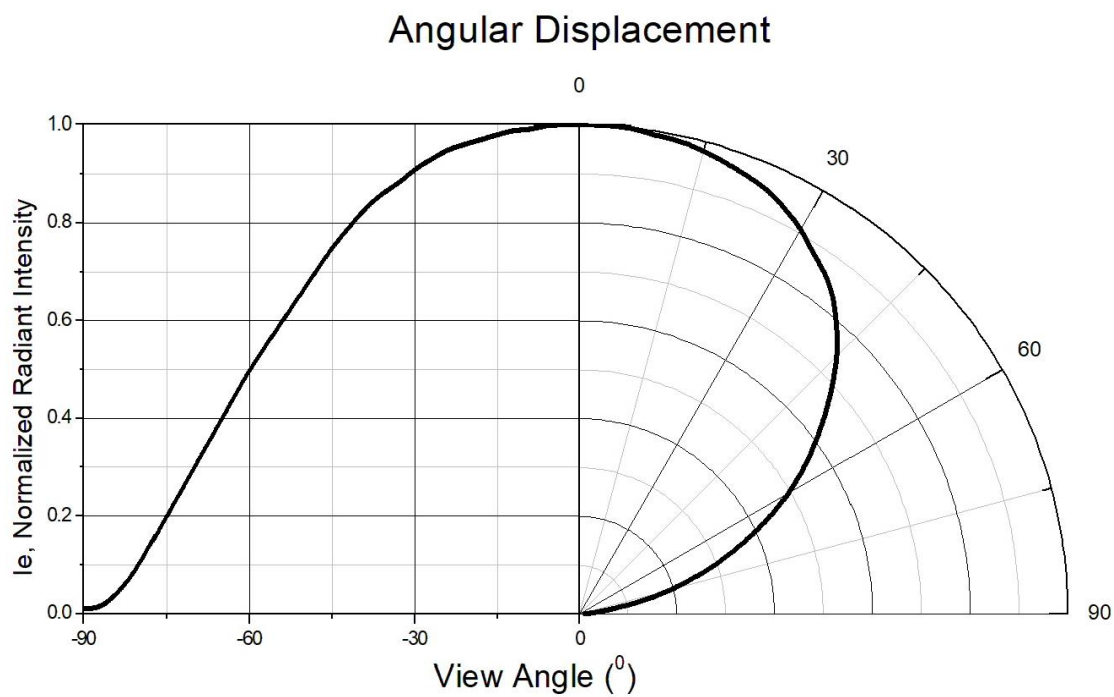


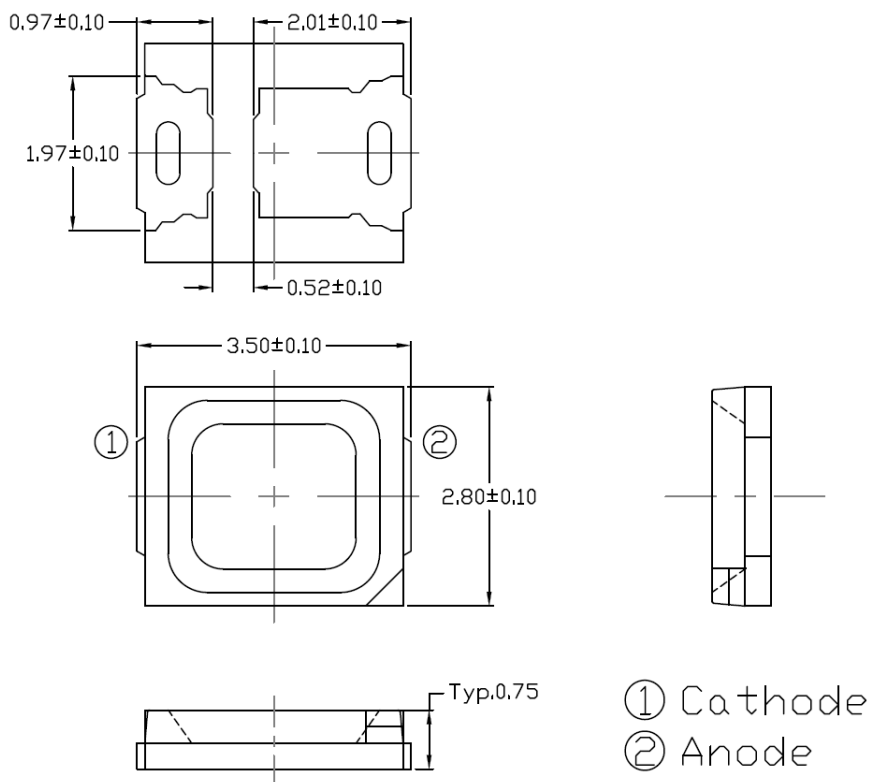
Figure 7



# YC283508-FTA4

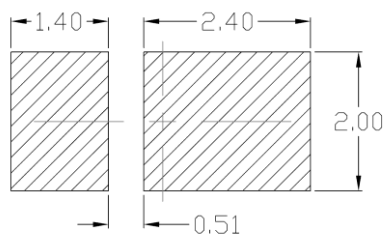
## SMD Type Yellow Emitter

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



Note: Tolerance unless mentioned is  $\pm 0.1$  mm.

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



Note: Tolerance unless mentioned is  $\pm 0.1$  mm.

### Ordering Information

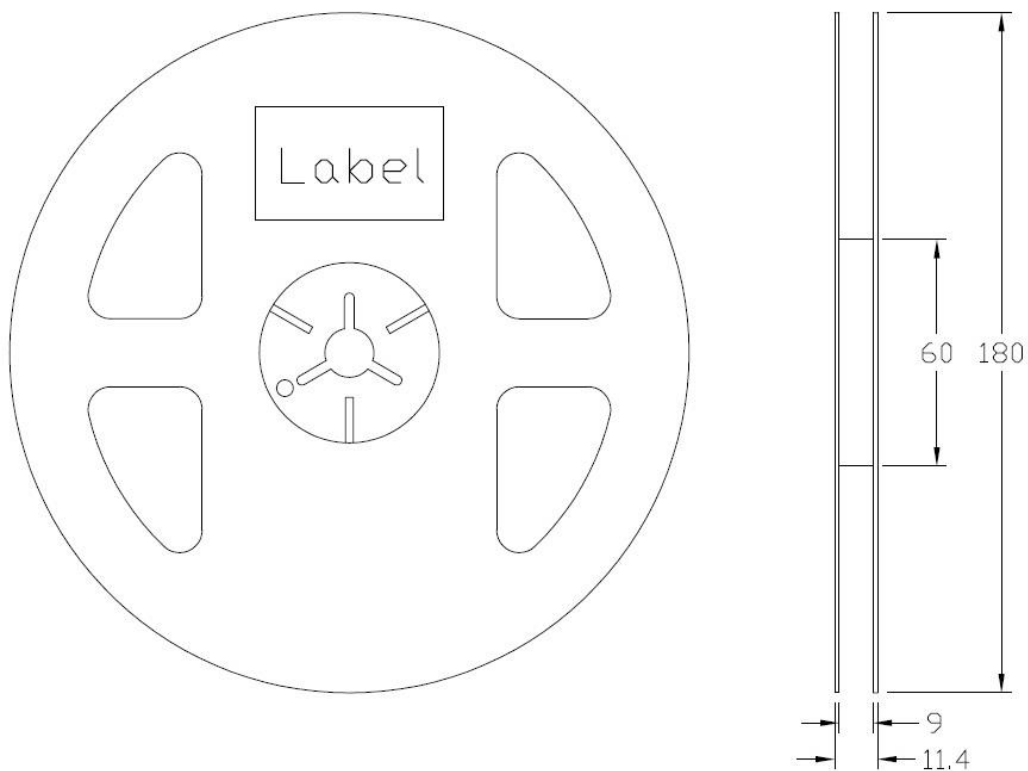
Part Number	Description	Quantity
YC283508-FTA4	Tape & Reel	4000 pcs



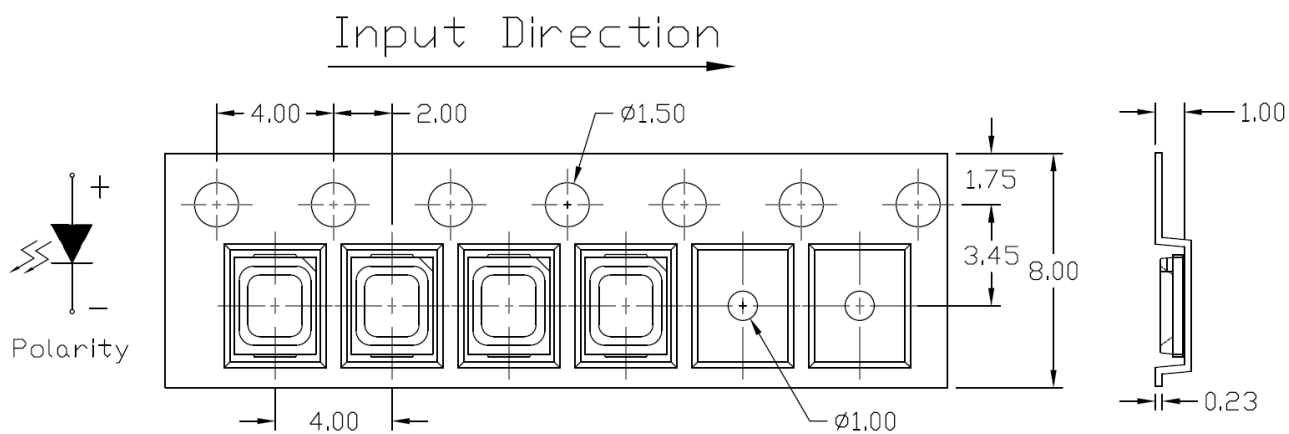
# YC283508-FTA4

## SMD Type Yellow Emitter

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



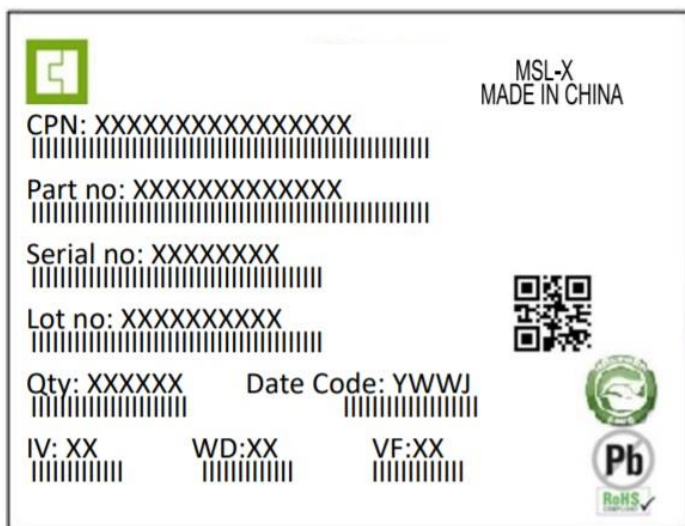
### Tape Dimension *All dimensions are in mm, unless otherwise stated*



Note: Tolerance unless mentioned is  $\pm 0.1$  mm.



### Label Form Specification



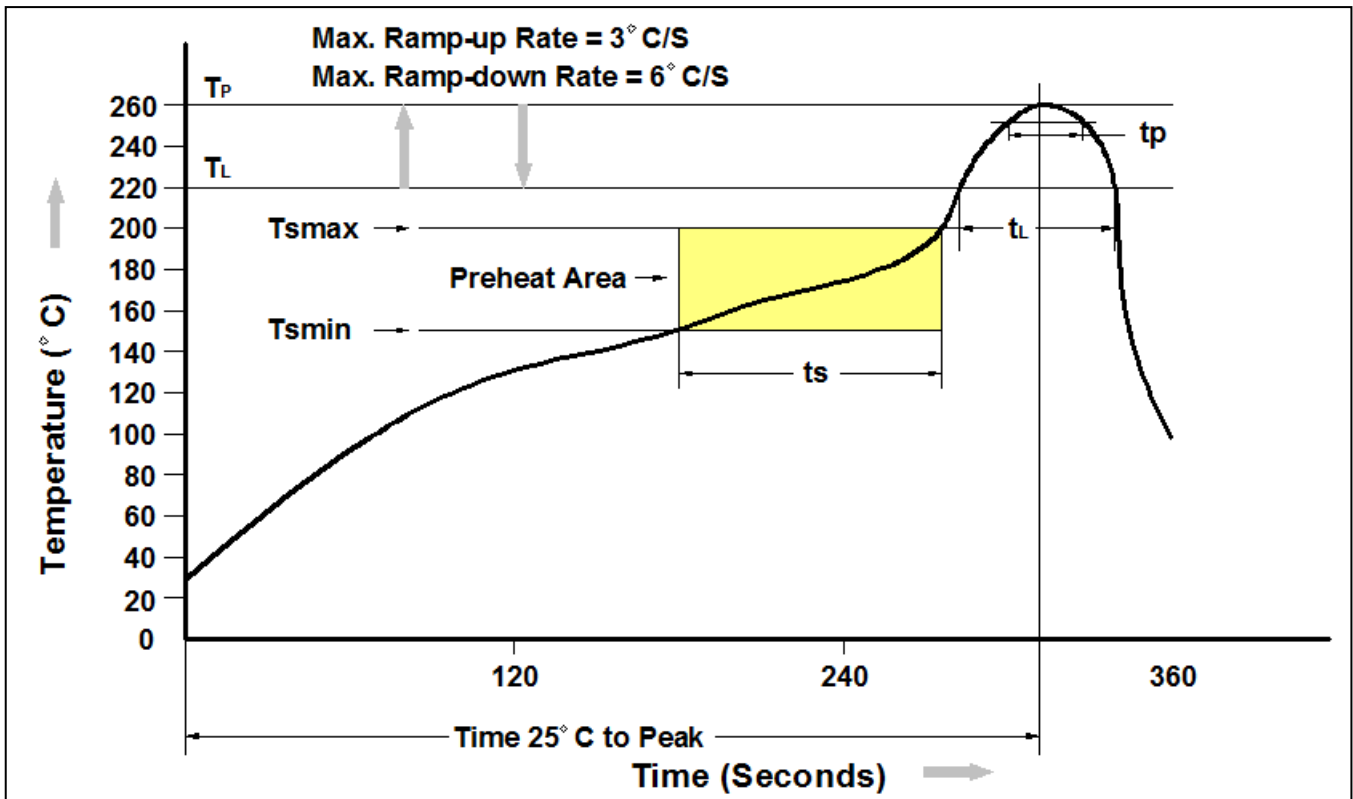
CPN : Customer Part Number  
 Part no: CTM Production Number  
 Serial no: Production Number  
 Lot no: Lot number  
 Q'ty: Packing Quantity  
 Date Code: Manufacture Date  
 IV : Bin Code of Luminous Intensity  
 WD : Bin Code of Dominant Wavelength  
 VF : Bin Code of Forward Voltage  
 MADE IN CHINA: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