

PRELIMINARY SPEC

Part Number: AA3528APR7C/A

Purple



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

Features

- Single color.
- Suitable for all SMT assembly and solder process.
- Available on tape and reel.
- Ideal for backlighting.
- Package : 1500pcs / reel.
- Moisture sensitivity level : level 4.
- RoHS compliant.

Description

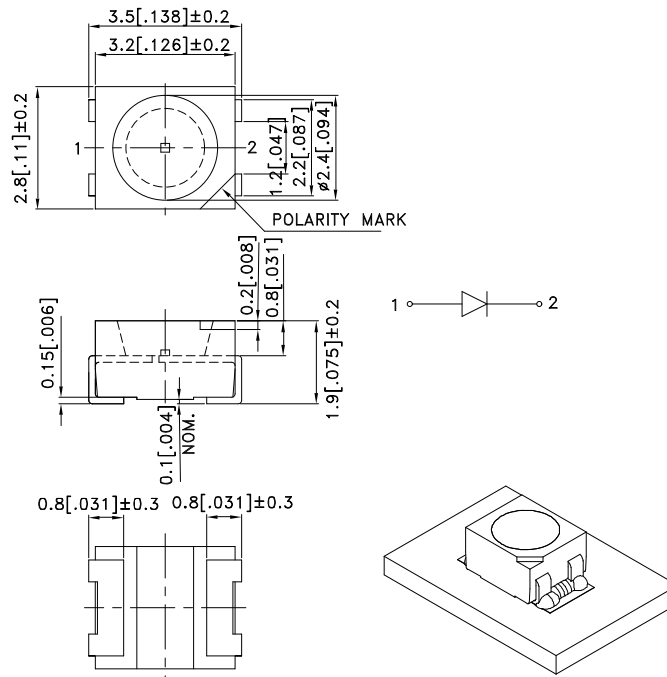
The Purple source color devices are made with InGaN on SiC Light Emitting Diode.

Static electricity and surge damage the LEDs.

It is recommended to use a wrist band or anti-electrostatic glove when handling the LEDs.

All devices, equipment and machinery must be electrically grounded.

Package Dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25(0.01)$ unless otherwise noted.
3. Specifications are subject to change without notice.
4. The device has a single mounting surface. The device must be mounted according to the specifications.



Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) [2] @ 20mA		Viewing Angle [1]
			Min.	Typ.	2θ1/2
AA3528APR7C/A	Purple (InGaN)	WATER CLEAR	50	100	120°

Notes:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
2. Luminous intensity/ luminous Flux: +/-15%.

Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
V _F [1]	Forward Voltage	Purple	3.2	4.0	V	I _F =20mA
I _R	Reverse Current	Purple		10	uA	V _R = 5V
x [2]	Chromaticity Coordinates	Purple	0.2			
y [2]			0.08			
C	Capacitance	Purple	100		pF	V _F =0V;f=1MHz

Notes:

1. Forward Voltage: +/-0.1V.
2. Measurement tolerance of the chromaticity coordinates is ±0.01

Absolute Maximum Ratings at TA=25°C

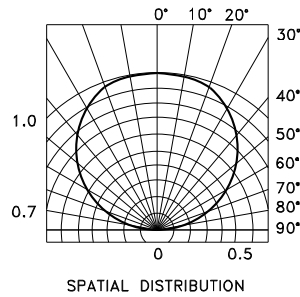
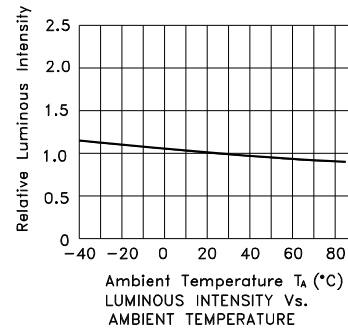
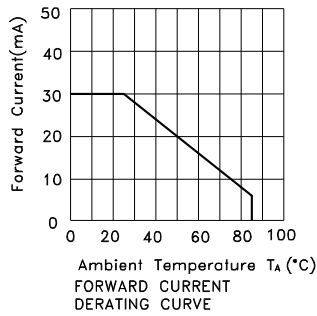
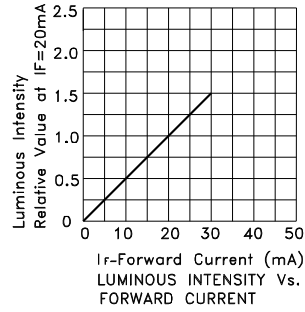
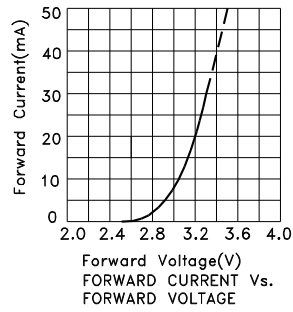
Parameter	Purple	Units
Power dissipation	120	mW
DC Forward Current	30	mA
Peak Forward Current [1]	100	mA
Reverse Voltage	5	V
Operating Temperature	-40°C To +85°C	
Storage Temperature	-40°C To +85°C	

Note:

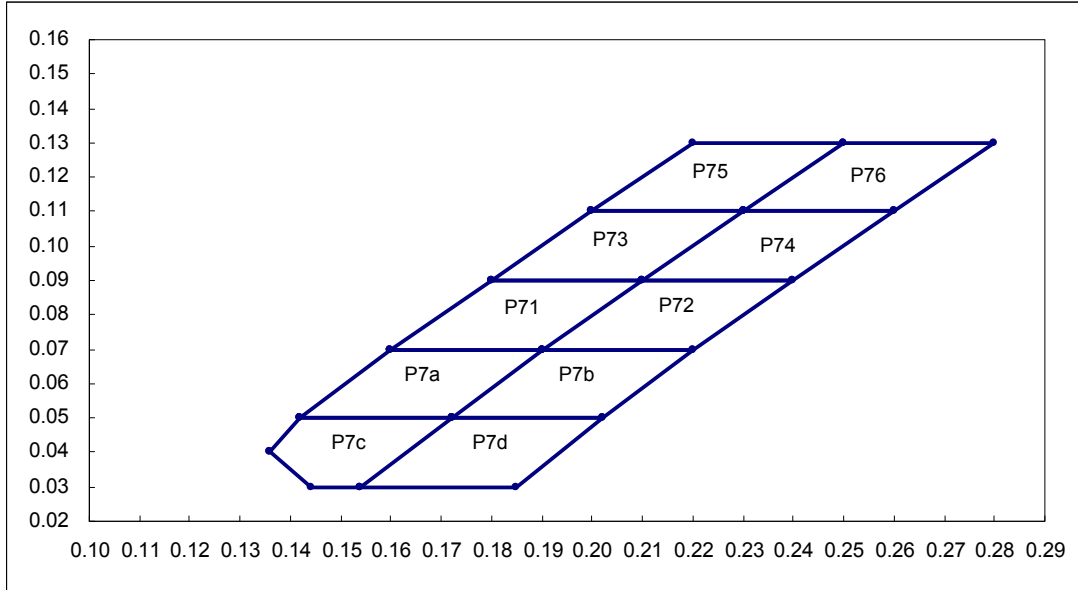
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

Purple

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P7c					P7d					
x	0.136	0.144	0.154	0.172	0.142	x	0.154	0.185	0.202	0.172
y	0.040	0.030	0.030	0.050	0.050	y	0.030	0.030	0.050	0.050

P7a				
x	0.142	0.172	0.190	0.160
y	0.050	0.050	0.070	0.070

P7b				
x	0.172	0.202	0.220	0.190
y	0.050	0.050	0.070	0.070

P71				
x	0.160	0.190	0.210	0.180
y	0.070	0.070	0.090	0.090

P72				
x	0.190	0.220	0.240	0.210
y	0.070	0.070	0.090	0.090

P73				
x	0.180	0.210	0.230	0.200
y	0.090	0.090	0.110	0.110

P74				
x	0.210	0.240	0.260	0.230
y	0.090	0.090	0.110	0.110

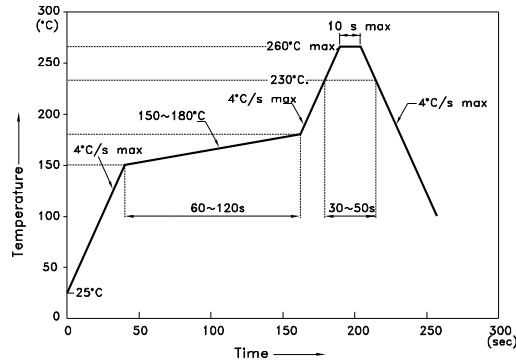
P75				
x	0.200	0.230	0.250	0.220
y	0.110	0.110	0.130	0.130

P76				
x	0.230	0.260	0.280	0.250
y	0.110	0.110	0.130	0.130

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Reflow soldering is recommended and the soldering profile is shown below.
Other soldering methods are not recommended as they might cause damage to the product.

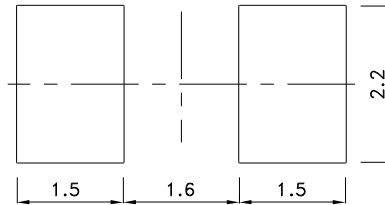
Reflow Soldering Profile For Lead-free SMT Process.



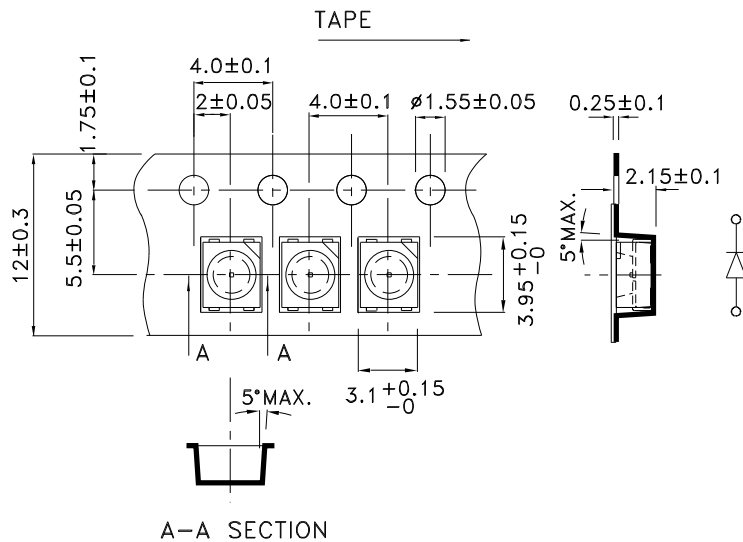
NOTES:

1. We recommend the reflow temperature 245°C(+/-5°C). The maximum soldering temperature should be limited to 260°C.
2. Don't cause stress to the epoxy resin while it is exposed to high temperature.
3. Number of reflow process shall be 2 times or less.

Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)



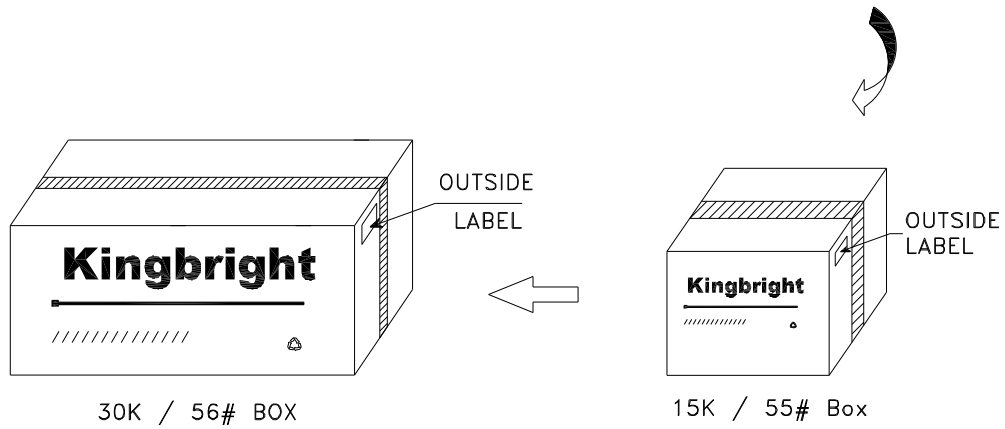
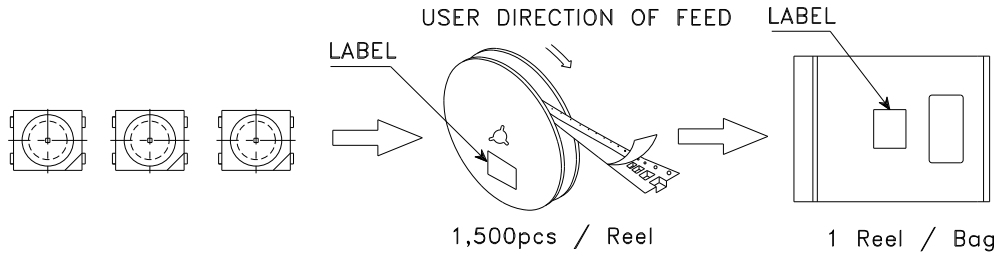
Tape Dimensions (Units : mm)




Kingbright

PACKING & LABEL SPECIFICATIONS

AA3528APR7C/A



Kingbright	
P/NO: AA3528Axxx	
QTY: 1,500 pcs	Q.C. Q C xx xx xxxx PASSED
S/N: XXXX	
CODE: XXX	
LOT NO:	
 xxxxxxxxxxxxxxxxxxxxxxxx	
RoHS Compliant	