

Kingbright

SUBMINIATURE SOLID STATE LAMP

Part Number: AM27YC03

Yellow

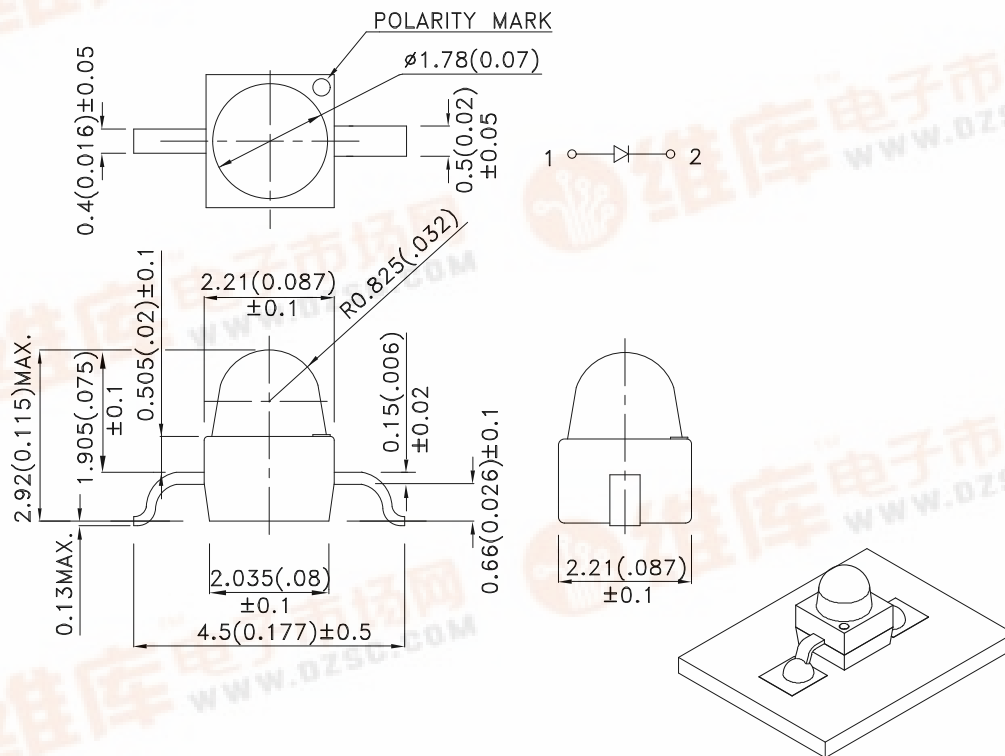
Features

- SUBMINIATURE PACKAGE.
- GULL WING.
- LONG LIFE - SOLID STATE RELIABILITY.
- LOW PACKAGE PROFILE.
- PACKAGE :1000PCS / REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 3.
- RoHS COMPLIANT.

Description

The Yellow source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Yellow Light Emitting Diode.

Package Dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25(0.01")$ unless otherwise noted.
3. Lead spacing is measured where the leads emerge from the package.
4. Specifications are subject to change without notice.
5. 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
AM27YC03	Yellow (GaAsP/GaP)	WATER CLEAR	10	30	20°

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
λpeak	Peak Wavelength	Yellow	590		nm	IF=20mA
λD [1]	Dominant Wavelength	Yellow	588		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Yellow	35		nm	IF=20mA
C	Capacitance	Yellow	20		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Yellow	2.1	2.5	V	IF=20mA
IR	Reverse Current	Yellow		10	uA	VR=5V

Notes:

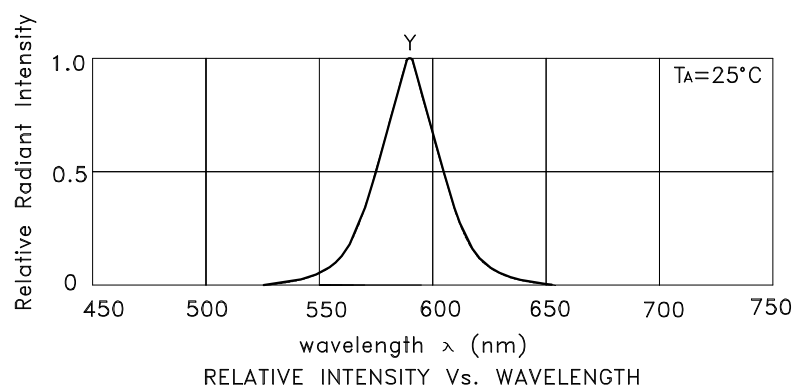
- 1.Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

Parameter	Yellow	Units
Power dissipation	75	mW
DC Forward Current	30	mA
Peak Forward Current [1]	140	mA
Reverse Voltage	5	V
Operating Temperature	-40°C To +85°C	
Storage Temperature	-40°C To +85°C	

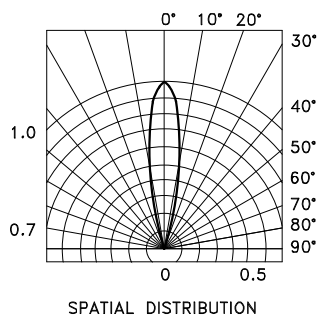
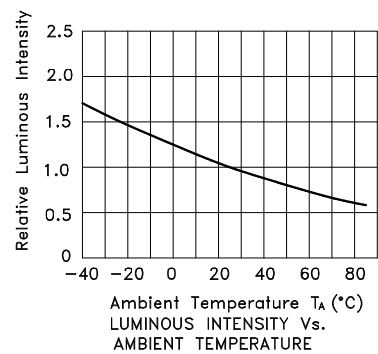
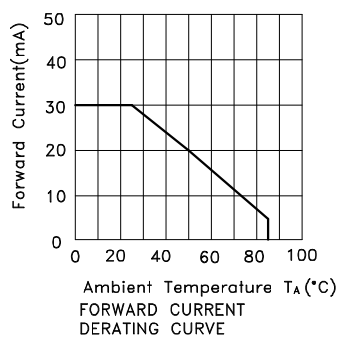
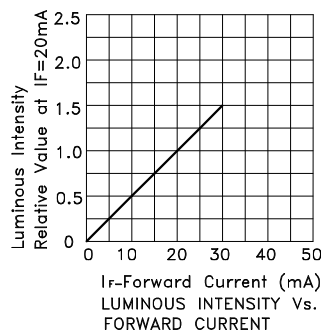
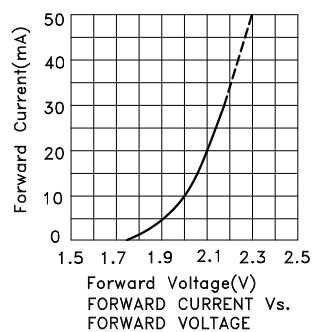
Note:

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



Yellow

AM27YC03



The graph illustrates the temperature profile of the furnace during the heat treatment of the specimen. The Y-axis represents Temperature in degrees Celsius (°C), ranging from 0 to 300. The X-axis represents Time in seconds (sec), ranging from 0 to 300. The profile starts at 25°C, rises at 4°C/s to 150°C (40s), then to 180°C (60-120s), then to 230°C (4°C/s max), then to 260°C (10s max), and finally cools at 4°C/s.

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.

Technical drawing of a tape with four circular features. The drawing includes a top view and a cross-section A-A.

Top View Dimensions:

- Overall width: 12 ± 0.2
- Overall height: 1.75 ± 0.1
- Distance from top edge to center line: 5.5 ± 0.05
- Distance between center lines of adjacent features: 4.0 ± 0.05
- Distance from center line to the edge of the feature: 2 ± 0.05
- Distance between the outer edges of adjacent features: 4.0 ± 0.1
- Radius of the circular feature: $\phi 1.5^{+0.1}_{-0}$
- Maximum thickness of the feature: 5°MAX.

Cross-section A-A Dimensions:

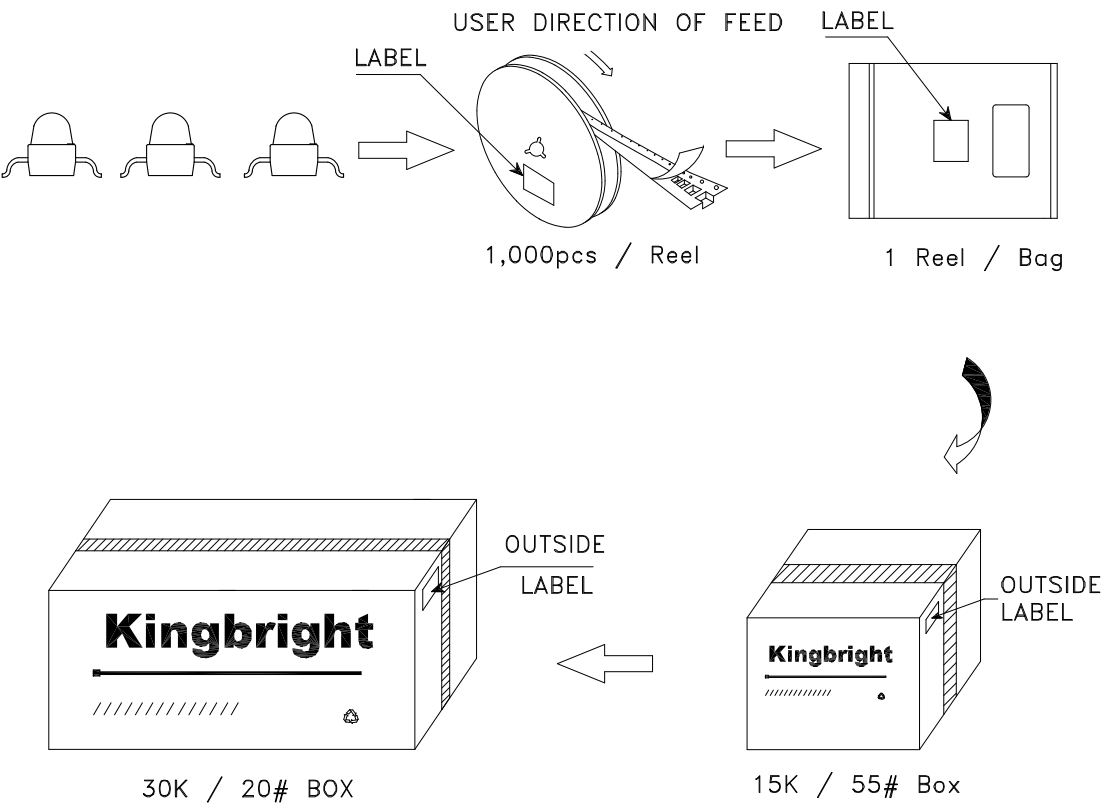
- Overall height: 3.05 ± 0.1
- Distance from top edge to the start of the feature: 0.3 ± 0.05
- Distance from the start of the feature to the bottom edge: 2.7 ± 0.1
- Distance from the bottom edge to the center line: 5.3 ± 0.1
- Maximum thickness of the feature: 5°MAX.

Section A-A Dimensions:

- Overall width: 2.2 ± 0.1
- Distance from center line to the edge: 0.8 ± 0.1
- Maximum thickness of the feature: 5°MAX.

PACKING & LABEL SPECIFICATIONS

AM27YC03



Kingbright	
P/NO: AM27xxx03	
QTY: 1,000 pcs	Q.C. Q C xx xx xxxx PASSED
S/N: XXXX	
CODE: XXX	
LOT NO:	
 xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	
RoHS Compliant	