

YETDA INDUSTRY LTD

Technical Data Sheet

MODEL NO : 195UR/ANB4

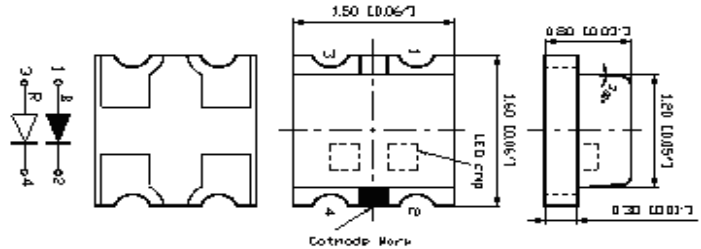
0605Package 1.6*1.5mm Chip LEDs

Features :

- Package in 8mm tape on 7 " diameter reel
- Compatible with automatic placement equipment
- Compatible with reflow solder process

Applications :

- Indicators
- Automotive : backlighting in dashboard and switch
- Backlight for LCD

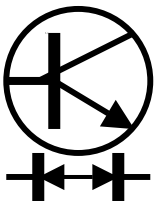


Electrical/Optical Characteristics(Ta=25)

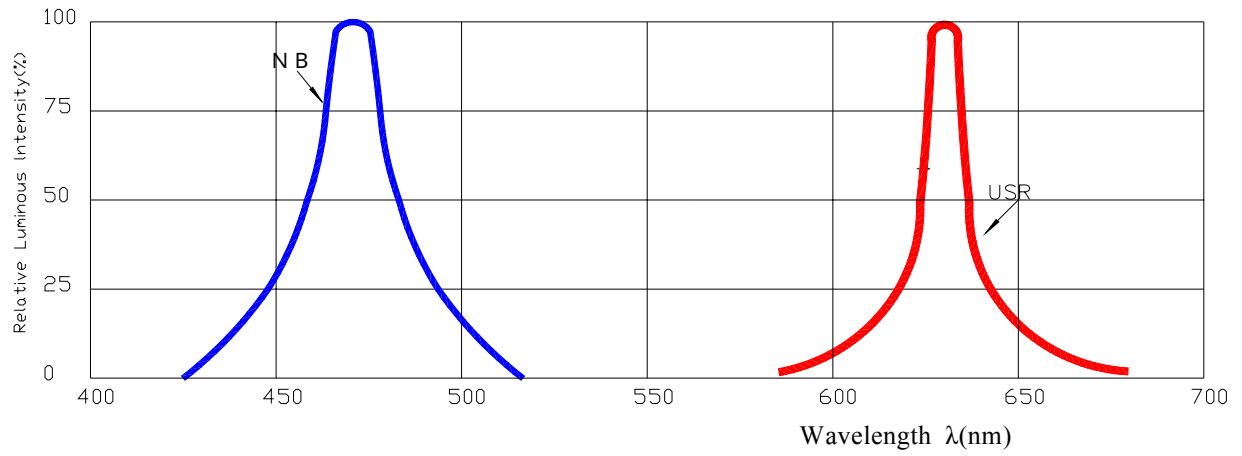
Chip			Lens Appearance	Absolute Maximun Rating			Electro-optical Data(20mA)				Viewing Angle 2 1/2(deg)
Emitted Color	P (nm)	D (nm)		(nm)	Pd (mW)	If (mA)	Vf(V)		Iv(mcd)		
							Typ.	Max.	Min.	Typ.	
Blue	469	470	Water Clear	20	78	20	3.1	3.5	22.5	47	120
Red	629	630		25	68	20	2	2.3	45	80	

Absolute Maximum Ratings(Ta=25)

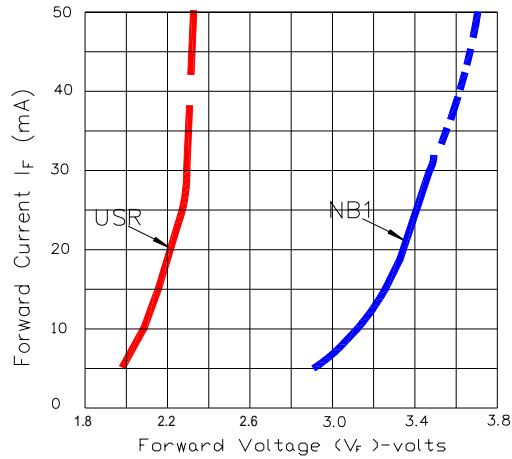
Parameter	Symbol	Maximum	Unit
Peak Forward Current(1/10 Duty Cycle 0.1ms Pulse Width)	IF(Peak)	100	mA
Continuous Forward Current	IF	30	mA
Reverse Voltage	VR	5	V
Derivation Linear From 25		0.3	mA/
Operating Temperature Range	Topr	-30 to +80	
Storage Temperature Range	Tstg	-40 to +90	



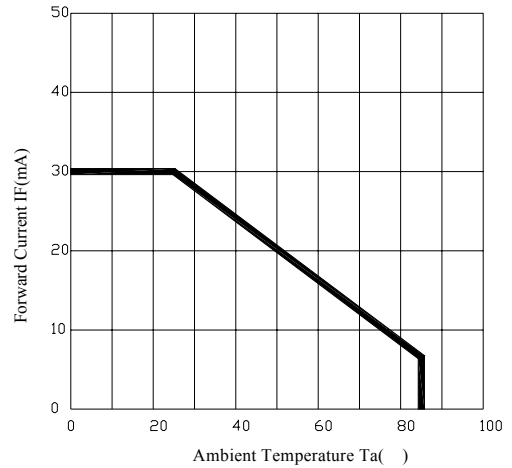
Spectrum Distribution



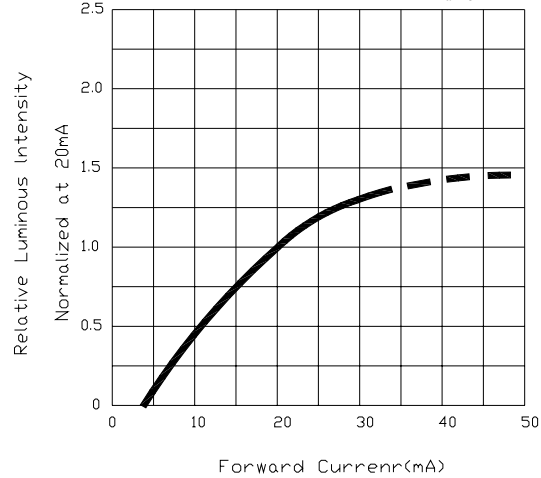
Forward Current Vs. Forward Voltage
 $T_a = 25^\circ\text{C}$



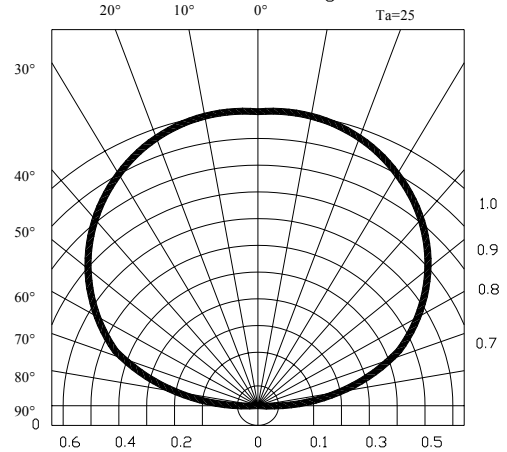
Forward Current Derating Curve

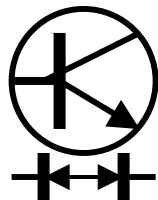


Luminous Intensity Vs. Forward Current
 $T_a = 25^\circ\text{C}$

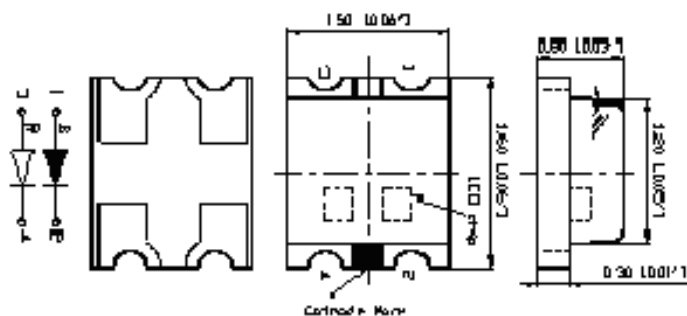


Radiation Diagram
 $T_a = 25^\circ\text{C}$

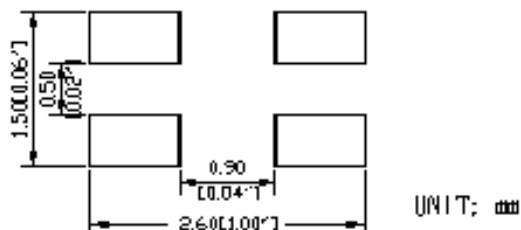




● Package Dimensions



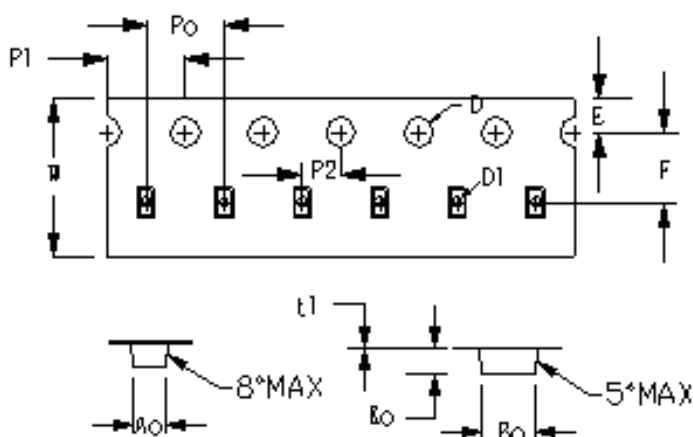
● Recommended Soldering Pattern

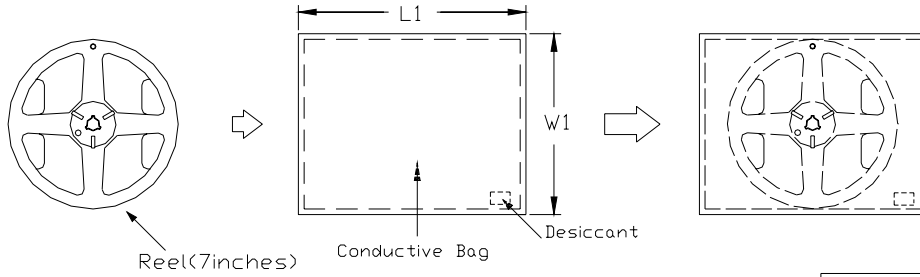
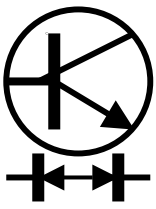


● Tape Specification : 3000pcs Per Reel

Packing Size													
Item	W	P1	E	F	D	D1	Po	10Po	P2	Ao	Bo	Ko	t
Spec.	8.00	4.00	1.75	3.50	1.5	1.0	4.00	40.00	2.00	1.42	2.24	1.04	0.254
Tolerance	±0.20	±0.10	±0.10	±0.05	±0.1	±0.25	±0.1	±0.20	±0.05	±0.10	±0.10	±0.10	±0.02

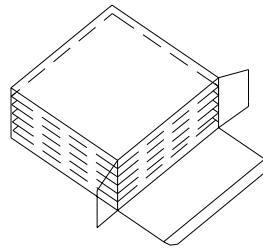
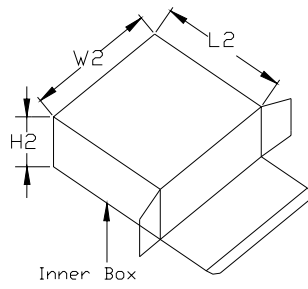
● Tape Specifications





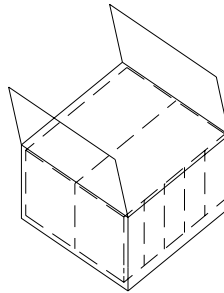
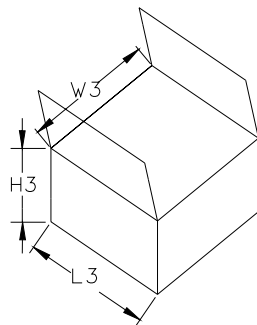
Dimension	L1	W1
Spec.	253	224

Unit : mm



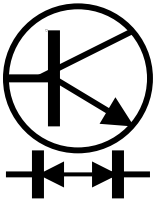
Dimension	L2	W2	H2
Outside	220	190	60
Inside	219.5	189.5	59.5

Unit : mm



Dimension	L3	W3	H3
Outside	395	320	240
Inside	382	307	227

Unit : mm

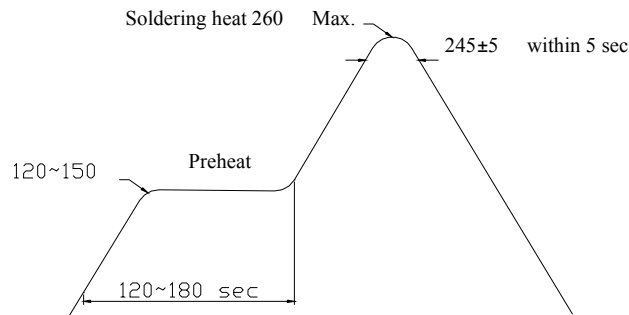


Descriptions :

- The Chip-LED Taping is much smaller than lead frame type components, thus enable smaller board size, higher packing density, reduced storage space and finally smaller equipment to be obtained.
- Besides, lightweight makes them ideal for miniature application, etc.

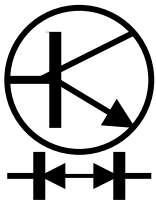
Soldering heat reliability (DIP) :

Please refer to the following figure :

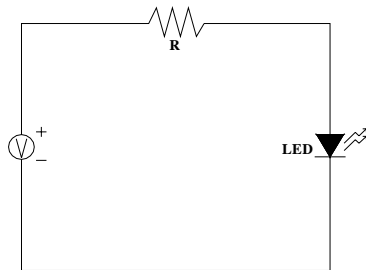


Precautions For Use :

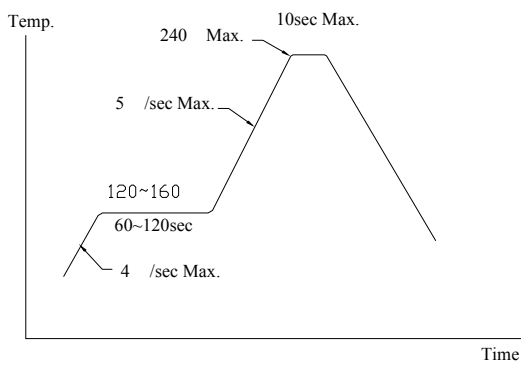
- Over – current – proof
Customer must apply resistors for protection, otherwise slight voltage shift will cause big current change (Burn out will happen)
- Storage
 1. The operation of temperature and R.H. are : 5 30 , 60%R.H. Max..
 2. Once the package is opened, the products should be used within a week. Otherwise, they should be kept in a dampproof box with desiccating regent. Considering the tape life, we suggest our customers to use our products within 1.5 year (from production date) .
 3. It's recommended to bake before soldering when the package is unsealed after 72 hrs. The condition is : 60 ±5 for 15hrs.



Test Circuit



Reflow Temp. / Time :



Reliability Test Items And Conditions

The reliability of products shall be satisfied with items listed below.

No.	Items	Test Condition	Test Hours/Cycles	Sample Size
1	Solder Heat	TEMP : 260 \pm 5	5 sec	48 pcs
2	Temperature Cycle	90 \sim 25 \sim -30 \sim 25 30m 5m 30m 5m	300Cycles	48 Pcs
3	Thermal Shock	100 \sim -55 10m 10m	100Cycles	48 Pcs
4	Operation Life	If=20mA	1000 Hrs	48 Pcs
5	High Temperature Storage	Temp:90	1000Hrs	48 Pcs
6	Low Temperature Storage	Temp:-30	1000Hrs	48 Pcs
7	High Temperature/High Humidity	80 / R.H80%	1000Hrs	48 Pcs