



**THE DATASHEET OF
ESS-JC190YGKT**





Jiangsu Everstar Electronics Co., Ltd.
Address: 2nd Floor, Building A2, SND Nanda Innovation Park,
No.618 Matou West Street, Liyang City, Jiangsu, China
TEL: +86-519-87557772 FAX: +86-519-87557773
Http: www.everstarelect.com

DATA SHEET

ESL NO.. : ESS-JC190YGKT

CUSNO.. :

REV : A / 0

Producer: Eden Auditor: _____ Approver: Jack

CUSTOMER'S APPROVAL : _____ DCC : _____

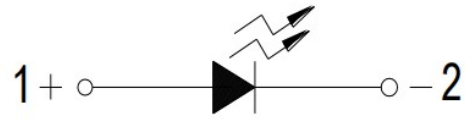
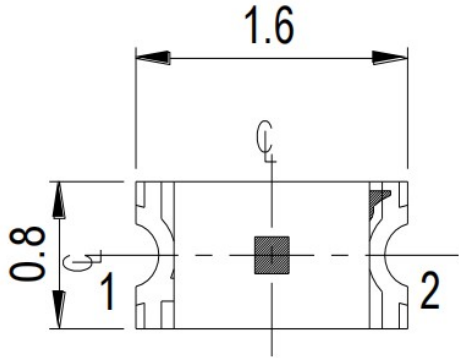


1.6×0.8×0.5mm SMD LED

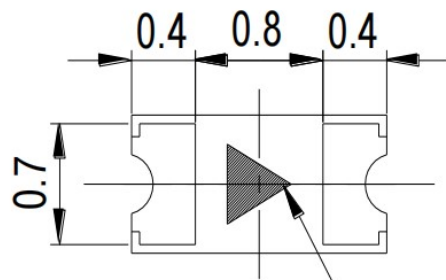
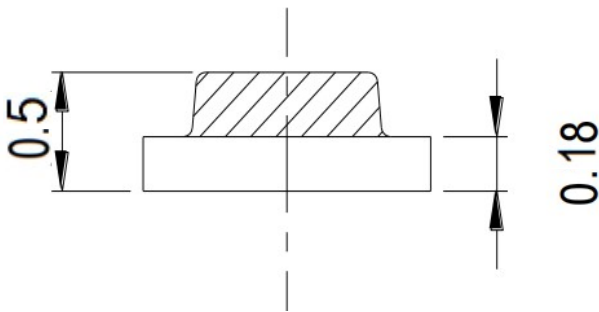
ESS-JC190YGKT

REV:A0

PACKAGE DIMENSIONS

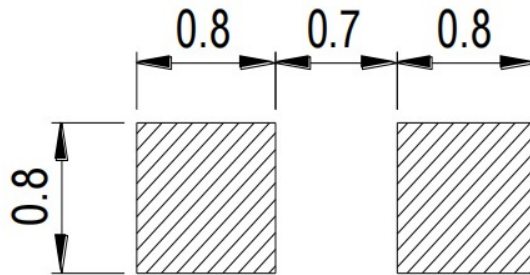


Polarity



Cathode Mark

Soldering PAD Suggested:



Note:

1. All Dimensions are in millimeters

2. Tolerance is $\pm 0.25\text{mm}$ (0.010 ")Unless otherwise specified.



1.6×0.8×0.5mm SMD LED

ESS-JC190YGKT

REV:A0

Feature:

- * High Luminous Intensity
- * Low Power Dissipation
- * good Reliability
- * Long Life

Applications:

- * household appliance
- * dashboard
- * communication equipmen

CHIP MATERIALS :

- * Dice Material: AlGaInP
- * Lens Color: Water Clear
- * Light Color: Yellow Green

ABSOLUTE MAXIMUM RATING : (Ta = 25°C)

Symbol	DESCRIPTION	Rated	Unit
Topr	Operating Temperature Range	-30°C ~ +85°C	
Tstg	Storage Temperature Range	-40°C ~ +100°C	
VR	Reverse Voltage Per Chip	5	V
PD	Power Dissipation Per Chip	70	mW
IF	Average Forward Current Per Chip	30	mA
IFp	Peak Forward Current Per Chip	70	mA

* Positive pulse current (Duty=0.1,1KHZ)

ELECTRO-OPTICAL CHARACTERISTICS : (Ta = 25°C)

SYMBOL	PARAMETER	TEST CONDITION	MIN.	TYP	MAX	UNIT
VF	Forward Voltage	IF = 5mA	1.7		2.2	V
IF	Peak Forward Current	VF=2.0V	1.0		20	mA
λ	Wavelength	IF = 20mA	565		575	nm
2θ 1/2	Half Intensity Angle	IF = 20mA	----	120	----	deg
IV	Luminous Intensity	IF = 5mA	12		32	mcd
		IF = 20mA	30	80		mcd
IR	Reverse Current	VR = 8V	----	----	10	μA



1.6×0.8×0.5mm SMD LED

ESS-JC190YGKT

REV:A0

BIN NAMEING

Luminous Intensity Rank Combination (IF=5mA)

BIN	Luminous Intensity(mcd)
1	12-16
2	16-20
3	20-25
4	25-32

Forward Voltage Rank Combination (IF=5mA)

BIN	Forward Voltage(V)
A	1.7-1.8
B	1.8-1.9
C	1.9-2.0
D	2.0-2.1
E	2.1-2.2

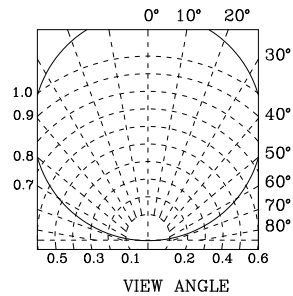
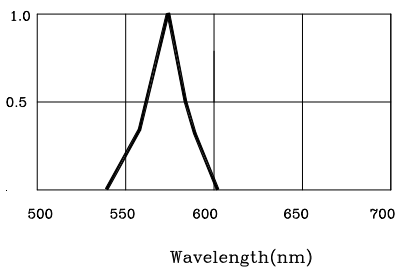
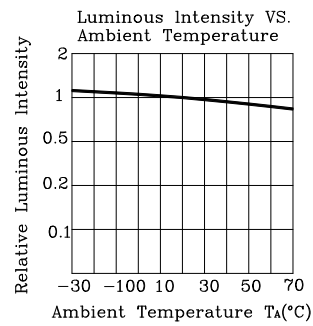
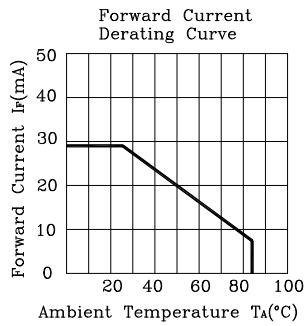
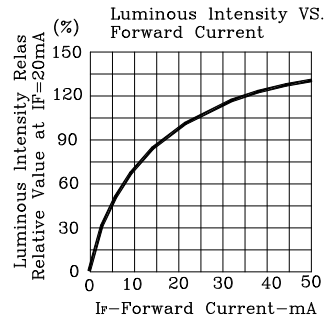
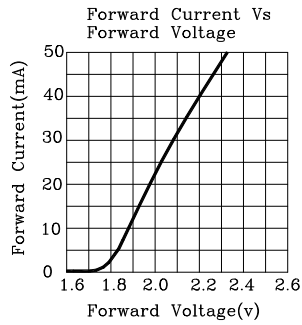


1.6×0.8×0.5mm SMD LED

ESS-JC190YGKT

REV:A0

Typical Electro-Optical Characteristics Curves





1.6×0.8×0.5mm SMD LED

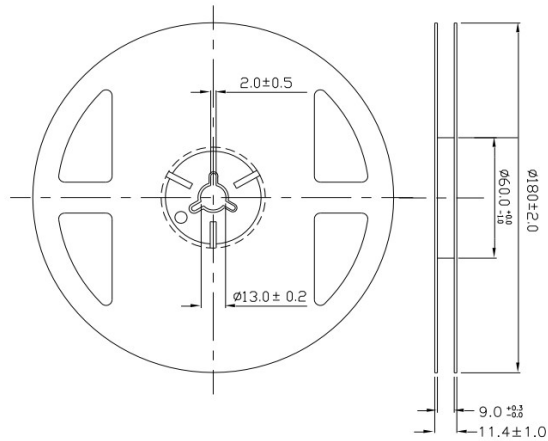
ESS-JC190YGKT

REV:A0

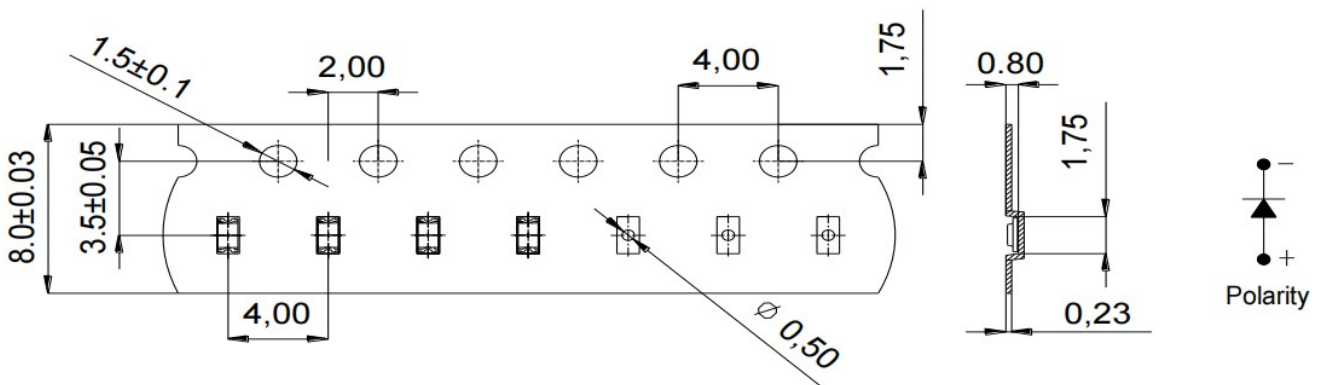
Label Explanation:

TYPE: product model	QTY: Quantity
BIN: Rank	LOT: Lot Number
λ d: Wavelength Range	IV: Luminous Intensity Range
VF: Forward Voltage Rang	IF: Testing Current

Reel and Tape Dimensions: 4000PCS/Reel



Progressive direction



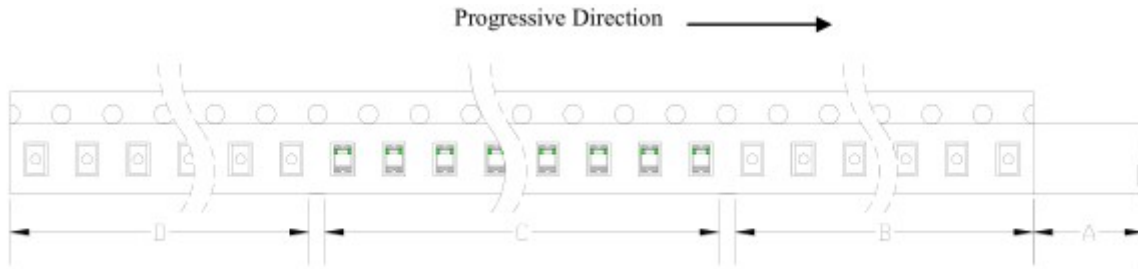


1.6×0.8×0.5mm SMD LED

ESS-JC190YGKT

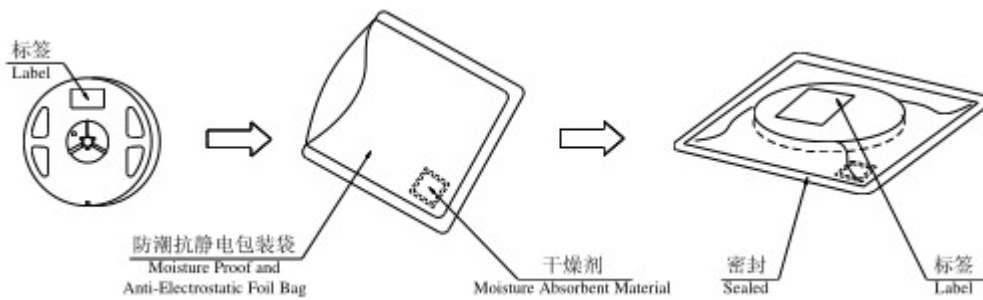
REV:A0

Tape Leader & Trailer Dimensions And Reel:

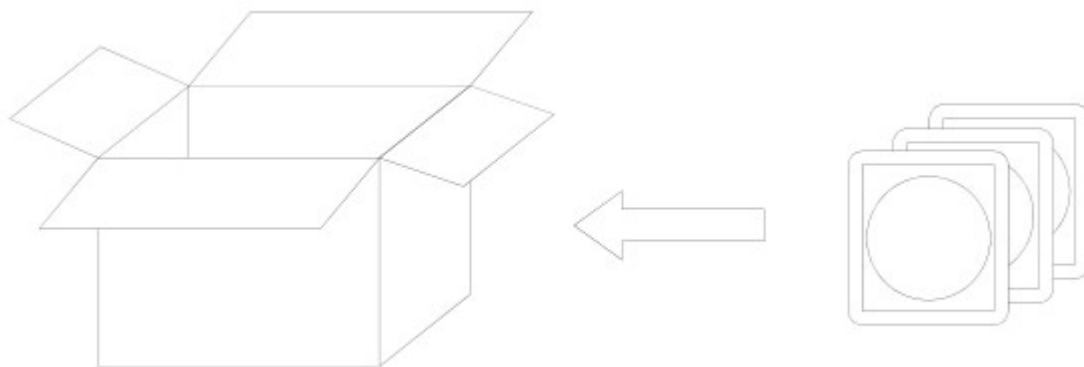


Packaging:

Moisture Proof and Anti- Electrostatic Foil Bag



Cardboard Box





1.6×0.8×0.5mm SMD LED

ESS-JC190YGKT

REV:A0

※ Precautions for use :

1. Customer must apply the current limiting resistor in the circuit so as to drive the LEDs within the rated current. Otherwise slight voltage shift maybe will cause big current change and burn out will happen.
2. Also, caution should be taken not to overload the LEDs with instantaneous high voltage at the turning ON and OFF of the circuit.
3. Storage:

3.1 Don't open the moisture proof bag before ready to use the LEDs.

3.2 The LEDs should be kept at 30°C or less and 60%RH or less before opening the package.

The max. storage period before opening the package is 1 year.

3.3 After opening the package, the LEDs should be kept at 30°C/35%RH or less, and it should

be used within 7 days.

3.4 If the LEDs be kept over the conditions of 3.4, baking is required before mounting.

Baking

condition as below: 60±5°C for 12 hrs.

4. Soldering condition:

4.1 Manual of soldering:

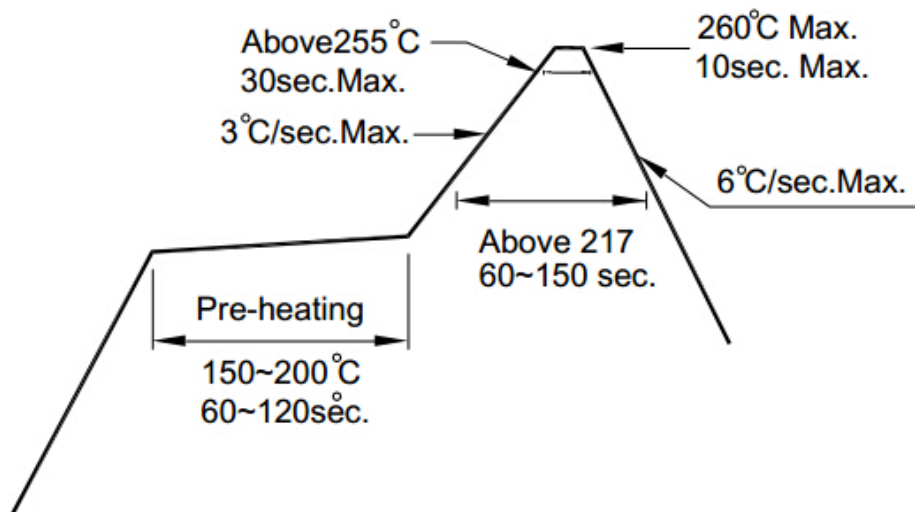
The temp. of the iron should be lower than 260°C and soldering within 3sec per solder-pad is to be observed.

4.2 Pb-free solder temp. -time profile

4.3 DIP soldering (Wave Soldering) temp. -time profile:

Note:

- a) Reflow soldering should not be done more than two times.
- b) Don't put stress on the LEDs when soldering.
- c) Don't warp the circuit board before it have been returned to normal ambient conditions after soldering.



Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

- [View ESS-JC190YGKT on WIN SOURCE](#)
- [Shanghai Everstar Electronics Co., Ltd. Information](#)

Optimize Your Supply Chain with WIN SOURCE Solutions

- ✓ Global Sourcing Solution
- ✓ Obsolete Management
- ✓ Cost Control Management
- ✓ Shortage Management
- ✓ Alternative Solution
- ✓ Excess Inventory Management