
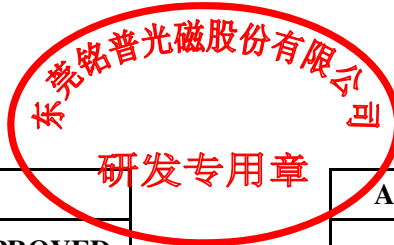


Product Specification for Approval

WE ARE PLEASED IN SUBMITTING OUR SAMPLES WITH SPECIFICATION TO YOU FOR APPROVAL.

| | | | |
|-------------------------|---|--|--------------|
| CUSTOMER | : | | |
| DESCRIPTION | : | 10/100 BASE-T TRANSFORMER | |
| MNC P/N | : | H1651CG | |
| VERSION | : | A0 | |
| CUSTOMER P/N | : | | |
| ISSUED DATE | : | 2020/04/27 | |
| PHOTO OF PRODUCT | : |  | |
| WEIGHT | : | | 0.27g |
| MADE IN | : | | CHINA |

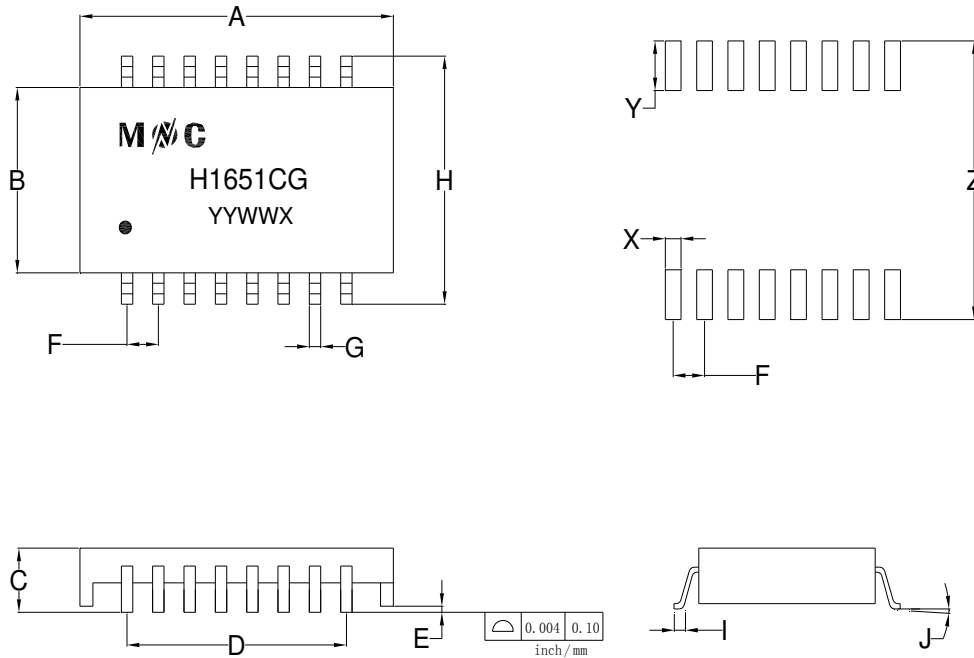


| APPROVED BY MNC | | | APPROVED BY CUSTOMER |
|--------------------------|--------------------------|--------------------------|----------------------|
| PREPARED BY | CHECKED BY | APPROVED BY | SIGNATURE OR STAMP |
| 研发部 2020-04-27 符晶晶 | 研发部 2020-04-27 肖明华 | 研发部 2020-04-27 何校民 | |

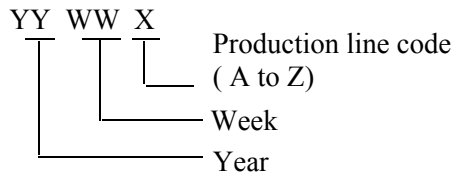
1. PLEASE SEND BACK US A COPY OF THE SPECIFICATION WITH YOUR STAMP OR SIGNATURE ONCE THE SAMPLES APPROVED.
2. IT WILL BE DEEMED THE SAMPLES TO BE APPROVED IF NO FEEDBACK.

东莞铭普光磁股份有限公司
 Add: Shipai Town, Dongguan City, Guangdong Province, China

TEL: +86-769-86921000
 FAX: +86-769-81701563

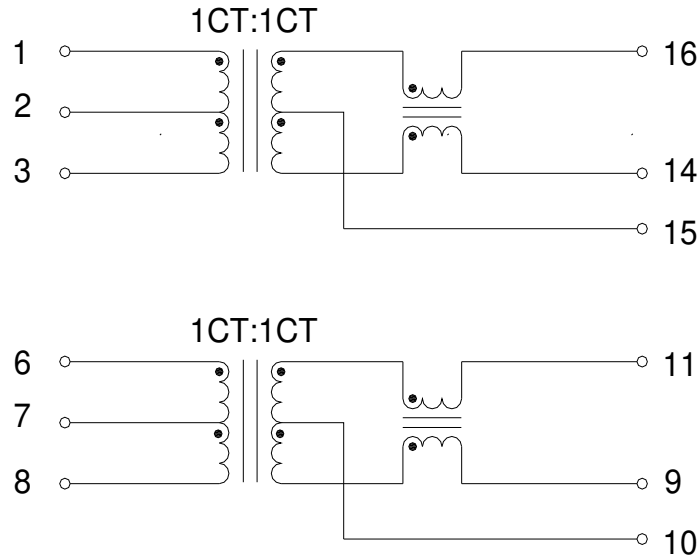
SPECIFICATION
Part No. H1651CG
A. MECHANICAL :


Note: Laser printing marking

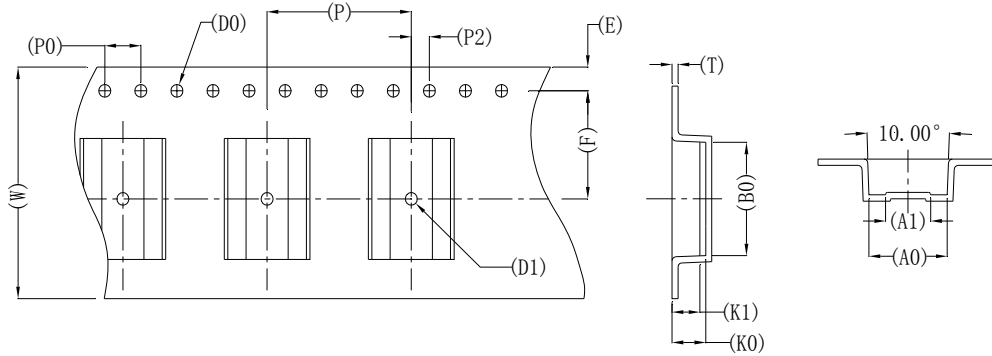


1. UNITS: mm/inch.
2. UNLESS OTHERWISE SPECIFIED ALL TOLERANCES ARE: TYPICAL
3. PIN LENGTH DON'T INCLUDE SOLDER POINT

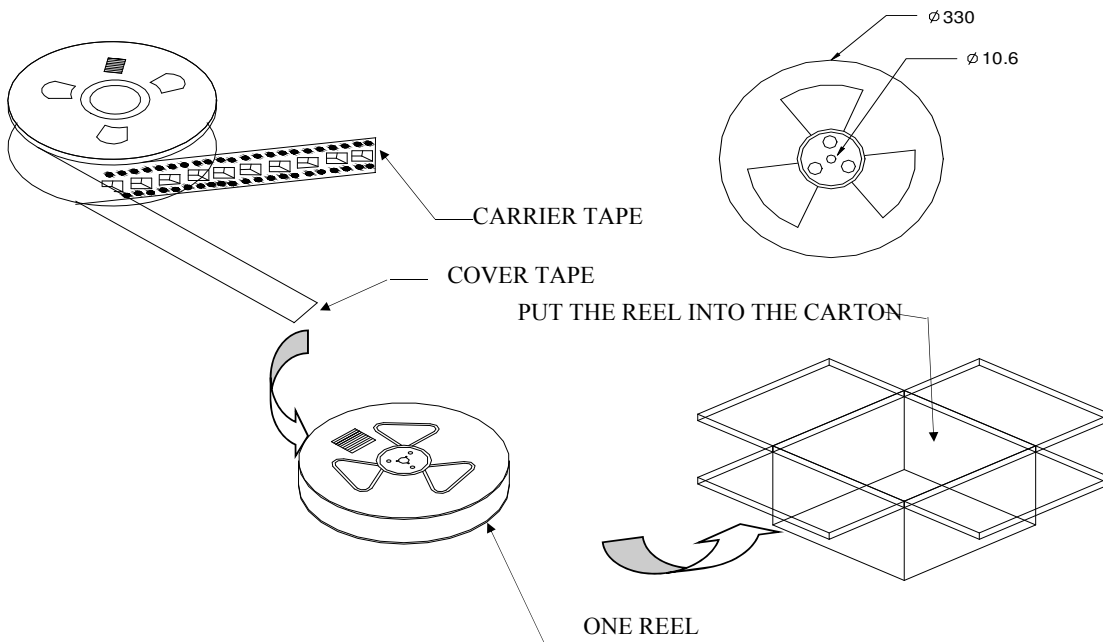
| DIM | MILLIMETERS | | | INCHES | | |
|-----|-------------|-------|-------|--------|-------|-------|
| | MIN | NOM | MAX | MIN | NOM | MAX |
| A | 12.20 | 12.70 | 13.20 | 0.480 | 0.500 | 0.520 |
| B | 6.60 | 7.10 | 7.60 | 0.260 | 0.280 | 0.299 |
| C | / | / | 2.50 | / | / | 0.098 |
| D | / | 8.89 | / | / | 0.350 | / |
| E | 0.05 | 0.20 | 0.35 | 0.002 | 0.008 | 0.014 |
| F | / | 1.27 | / | / | 0.050 | / |
| G | / | 0.46 | / | / | 0.018 | / |
| H | 8.95 | 9.45 | 9.95 | 0.352 | 0.372 | 0.392 |
| I | / | 0.76 | / | / | 0.030 | / |
| J | 0° | / | 8° | 0° | / | 8° |
| X | / | 0.76 | / | / | 0.030 | / |
| Y | / | 1.91 | / | / | 0.075 | / |
| Z | / | 10.65 | / | / | 0.419 | / |

SPECIFICATINON
Part No. H1651CG
B. SCHEMATIC :

C. ELECTRICAL SPECIFICATION @25°C

| ITEM | SPECIFICATION | TEST CONDITION | TEST EQUIPMENT |
|------------------------------|-------------------------|----------------|------------------|
| INDUCTANCE : | 350uH MIN. | 100KHz 0.2V | TH2819XB OR EQU. |
| LEAKAGE INDUCTANCE : | 0.50uH MAX. | 100KHz 0.2V | TH2819XB OR EQU. |
| INTERWINDING CAPACITANCE : | 25pF TYP. | 100KHz 0.2V | TH2819XB OR EQU. |
| DC RESISTANCE : | 1.2Ω MAX. | AT 25 °C | TOS 8020 OR EQU. |
| TURNS RATIO : | 1CT:1CT±5% | | TH2819XB OR EQU. |
| POLARITY : | 1-16,6-11 IN-PHASE | | |
| INSERTION LOSS : | -1.1dB MAX. | 0.5-100 MHz | E5061A OR EQU. |
| RETURN LOSS : | -18dB MIN. | 0.5-30 MHz | E5061A OR EQU. |
| | -18+20*log(f/30)dB MIN. | 30.1-60MHz | |
| | -12dB MIN. | 60.1-80MHz | |
| CROSS TALK : | -35dB MIN. | 0.5-40 MHz | E5061A OR EQU. |
| | -33+20*log(f/50)dB MIN. | 40.1-100 MHz | |
| DCMR : | -30dB Min | 0.5-100 MHz | E5061A OR EQU. |
| CMRR : | -30dB Min | 0.5-100 MHz | E5061A OR EQU. |
| ISOLATION HI-POT :PRI TO SEC | 1650VAC | 1mA,6S | |
| OPERATING TEMPERATURE | 0°C TO 70°C | | |

PACKAGE
Part No. H1651CG
D. PACKING:
a. PACKAGING AS BELOW (ONLY FOR A REFERENCE):


| ITEM | W | A ₀ | A ₁ | B ₀ | K ₀ | K ₁ | P | F | E | D ₀ | D ₁ | P ₀ | P ₂ | T |
|-----------|---------------------------------------|----------------|----------------|----------------|----------------|----------------|------------|------------|-----------|-------------------------------------|----------------|----------------|----------------|-----------|
| DIM | 24.00 ^{+0.3} _{-0.2} | 10.15±0.15 | 5.50±0.15 | 13.20±0.15 | 3.00±0.10 | 2.60±0.10 | 16.00±0.10 | 11.50±0.10 | 1.75±0.10 | Φ1.50 ^{+0.10} ₀ | Φ1.50MIN | 4.00±0.10 | 2.00±0.05 | 0.30±0.05 |
| ALTERNATE | | | | | | | | | | | | | | |


b. Q'TY:

1400 PCS PER REEL
 7 REEL PER CARTON
 9800 PCS PER CARTON

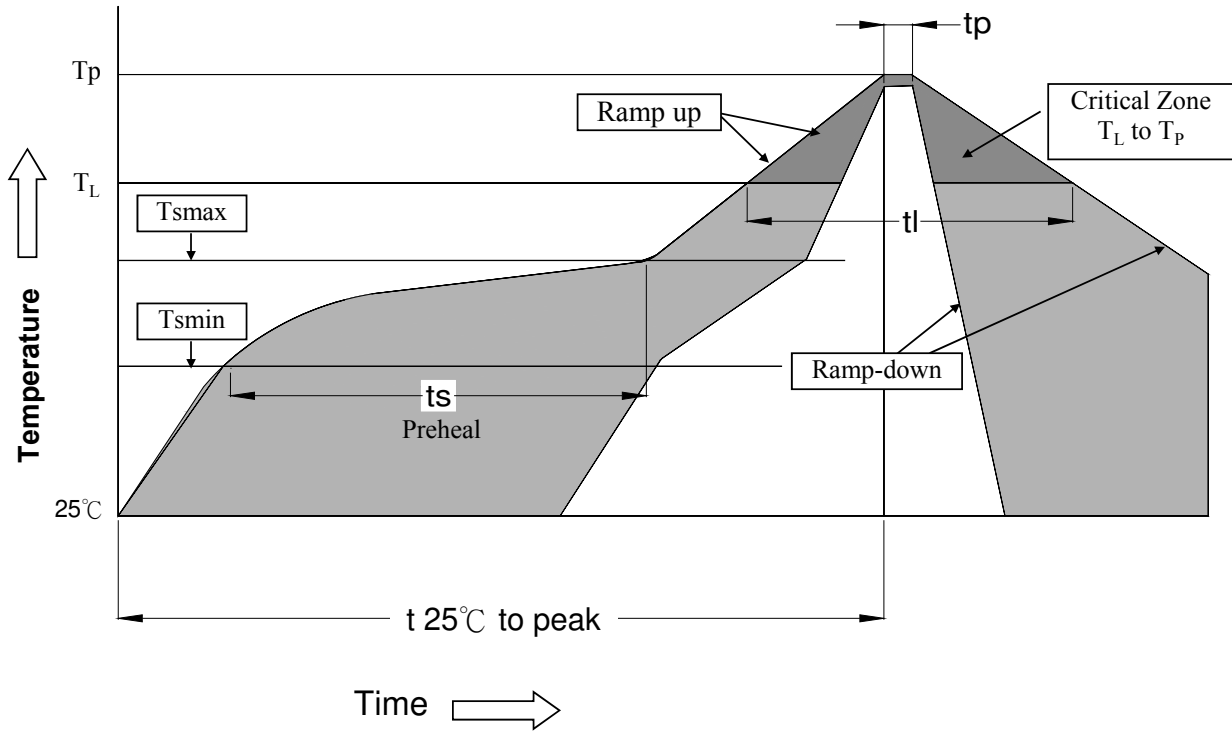
c. LABEL:

REMARK:

ABOVE PACKING IS FOR YOUR REFERENCE ONLY, WHICH BE CHANGED WITHOUT NOTICE.

MATERIAL LIST
Part No. H1651CG
E.BOM

| MATERIAL LIST | | | | | |
|----------------------|------------------------|--------------------|---------------|---|----------------|
| NO. | ITEM | MATERIAL | RATING | SUPPLIER OF MATERIAL | UL |
| 1 | CORE | Mn-Zn | ----- | YEAN SHING | N/A |
| | | | ----- | ZHONGSHAN CRC ELECTRONICS FACTORY | N/A |
| | | Ni-Zn | ----- | YEAN SHING | N/A |
| | | | ----- | ZHONGSHAN CRC ELECTRONICS FACTORY | N/A |
| 2 | COPPER WIRE | QPN180 | 180°C | ZHUHAI SUNTEK WIRE CO.,LTD | E234867 |
| | | Polysol 180 | 180°C | ELEKTRISOLA(MALAYSIA) SDN.BHD. | E258243 |
| 3 | CASE | WH-9100 | V-0 | WAH HONG INDUSTRIAL CORP | E150608 |
| 4 | PIN | C5191 | ----- | SHENZHEN MINGSCHIN INDUSTRIAL MATERIAL CO.,LTD | N/A |

RECOMMENDED REFLOW SOLDERING PROFILE
Part No. H1651CG
a. RECOMMENDED REFLOW SOLDERING PROFILE:

 $T_L = 217^\circ\text{C}$
 $T_p = 245^\circ\text{C}$
 $t_s = 60-180\text{s}$ $T_s \text{ max} = 200^\circ\text{C}$ $T_s \text{ min} = 150^\circ\text{C}$
 $t_L = 60-150\text{s}$ $t_p = 20-40\text{s}$ $T_{25^\circ\text{C to peak}} = 8\text{min max}$

 Ramp up rate = 3°C/s max

 Ramp down rate = 6°C/s max

*RoHS Compliant

*Solder Paste SAC 305 Sn 96.5/Ag 3.0/Cu 0.5

*Silkscreen thickness: 0.15mm Min

b. MOISTURE SENSITIVE LEVEL:

b.1. LEVEL: 1

b.2. SHELF LIFE: UNLIMITED

 b.3. STORAGE CONDITION: $\cong 30^\circ\text{C}/85\% \text{ RH}$