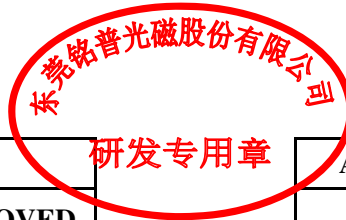





## Product Specification for Approval

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

<b>CUSTOMER</b>	:	
<b>DESCRIPTION</b>	:	<b>10/100/1000 BASE-T DUAL PORT SURFACE MOUNT MAGNETICS</b>
<b>MNC P/N</b>	:	<b>G4818CG</b>
<b>VERSION</b>	:	<b>A0</b>
<b>CUSTOMER P/N</b>	:	
<b>ISSUED DATE</b>	:	<b>2020/04/27</b>
<b>PHOTO OF PRODUCT</b>	:	
<b>WEIGHT</b>	:	<b>5.68g</b>
<b>MADE IN</b>	:	<b>CHINA</b>



APPROVED BY MNC			APPROVED BY CUSTOMER
PREPARED BY	CHECKED BY	APPROVED BY	SIGNATURE OR STAMP
			

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

**HISTORY FOR REVISED SPECIFICATION**

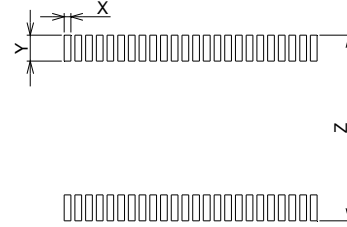
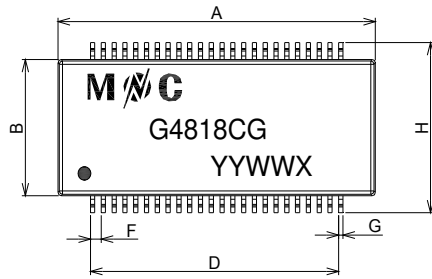
**Part No. G4818CG**

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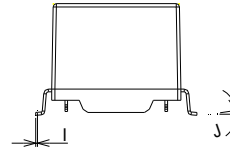
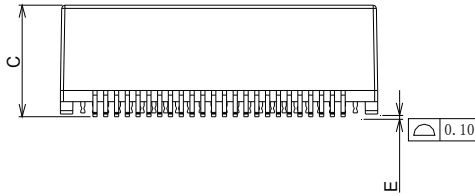
1. INDEX-----1  
2. CHANGE RECORD-----1  
3. MECHANICAL-----2  
4. SCHEMATIC-----3  
5. PACKING-----4  
6. MATERIAL LIST-----5  
7. RECOMMENDED SOLDERING PROFILE-----6

**CHANGE RECORD**

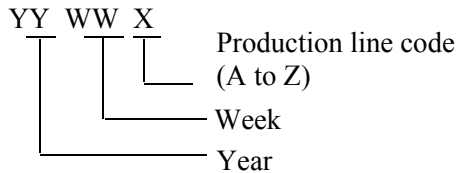
<b>REV.</b>	<b>DESCRIPTION (Content or Reason For Change)</b>	<b>DATE</b>	<b>REVISOR</b>
A0	INITIAL RELEASE	2020-04-27	Jingjing Fu

**SPECIFICATION**
**Part No. G4818CG**
**A. MECHANICAL :**


SUGGESTED PAD LAYOUT



Note: Laser printing marking



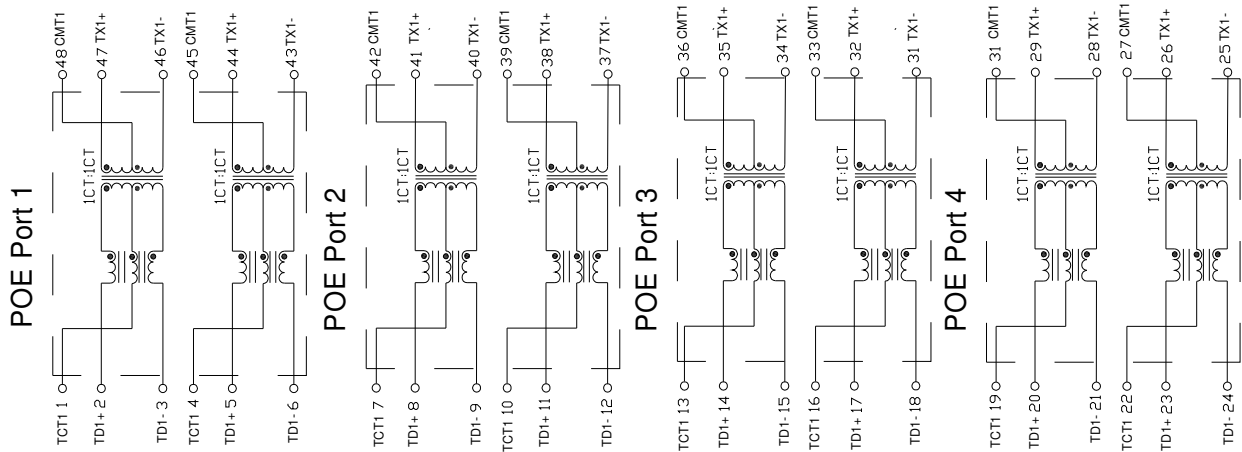
1. UNITS: mm/inch.
2. UNLESS OTHERWISE SPECIFIED ALL TOLERANCES ARE: TYPICAL
3. PIN LENGTH DON'T INCLUDE SOLDER POINT

DIM	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	29.50	30.00	30.50	1.161	1.181	1.201
B	11.70	12.20	12.70	0.461	0.480	0.500
C	9.50	10.00	10.50	0.374	0.394	0.413
D	/	23.46	/	/	0.924	/
E	0.15	0.30	0.45	0.006	0.012	0.018
F	0.52	1.02	1.52	0.020	0.040	0.060
G	0.30	0.40	0.50	0.012	0.016	0.020
H	14.74	15.24	15.74	0.580	0.600	0.620
I	/	1.02	/	/	0.040	/
J	0°	/	8°	0°	/	8°
X	/	0.64	/	/	0.025	/
Y	/	2.34	/	/	0.092	/
Z	/	16.44	/	/	0.647	/

**SPECIFICATION**

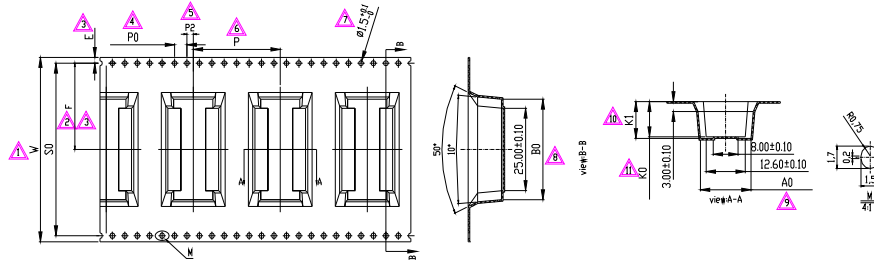
**Part No. G4818CG**

**B. SCHEMATIC :**

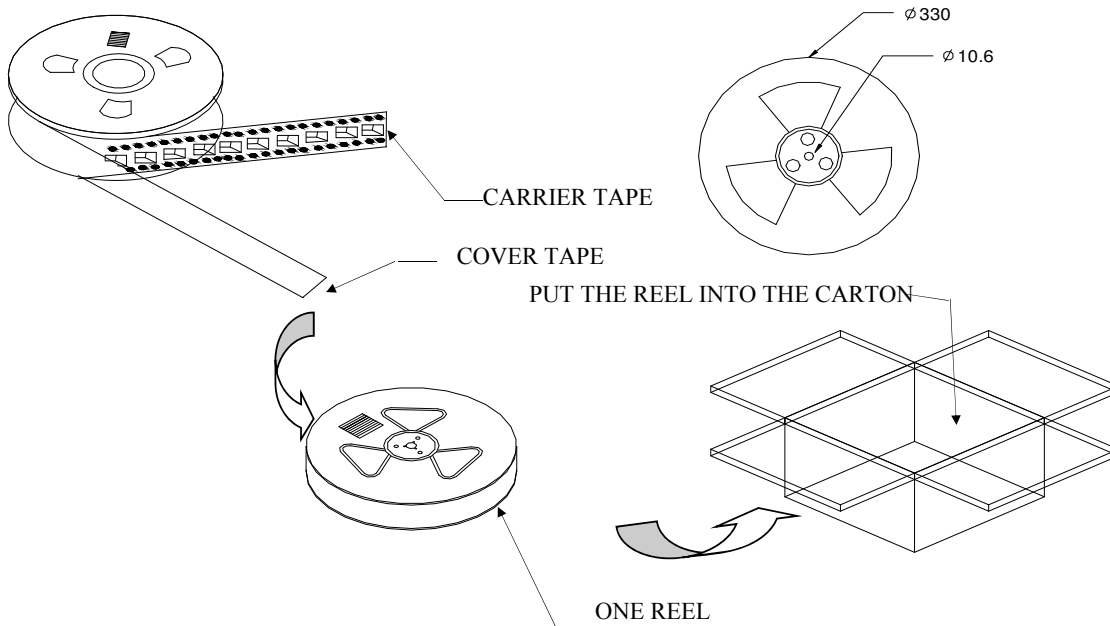


**C. ELECTRICAL SPECIFICATION @25°C**

ITEM	SPECIFICATION	TEST CONDITION	TEST EQUIPMENT
INDUCTANCE :	350uH MIN.	100KHz 0.2V 21mA DC Bias	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 :	1.6Ω MAX.	AT 25 °C	TOS 8020 OR EQU.
TURNS RATIO :	1CT:1CT±5%		TH2819XB OR EQU.
POLARITY :	2-47,5-44,8-41,11-38,14-35,17-32,20-29,23-26 IN-PHASE		
INSERTION LOSS :	-0.2-0.002*f <sup>1.4</sup> MAX.	1-100MHz	E5061A OR EQU.
RETURN LOSS :	-16dB MIN.	1-40 MHz	E5061A OR EQU.
	-10+20log(f/80)dB MIN.	40.1-100 MHz	
CROSS TALK :	-35dB MIN.	0.5-40 MHz	E5061A OR EQU.
	-33+20*log(f/50)dB MIN.	40.1-100 MHz	
CMRR :	-30dB MIN.	0.5-100 MHz	E5061A OR EQU.
ISOLATION HI-POT :PRI TO SEC	1500VAC	1mA,60S	7152AB OR EQU.
	1650VAC	1mA,6S	
OPERATING TEMPERATURE:	0°C TO 70°C		

**PACKAGE**
**Part No. G4818CG**
**D. PACKING:**
**a. PACKAGING AS BELOW (ONLY FOR A REFERENCE):**


ITEM	W	A0	B0	K0	K1	P	F	S0	E	D0	D1	P0	P2
DIM	56.00±0.30	16.30±0.10	30.50±0.10	10.50±0.10	11.00±0.10	28.00±0.10	26.20±0.15	52.40±0.10	1.75±0.10	±1.50 <sup>0.10</sup>	—	4.00±0.10	2.00±0.15


**b. Q'TY:**

180 PCS PER REEL  
 4 REELS PER CARTON  
 720 PCS PER CARTON

**c. LABEL:**

**REMARK:**

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

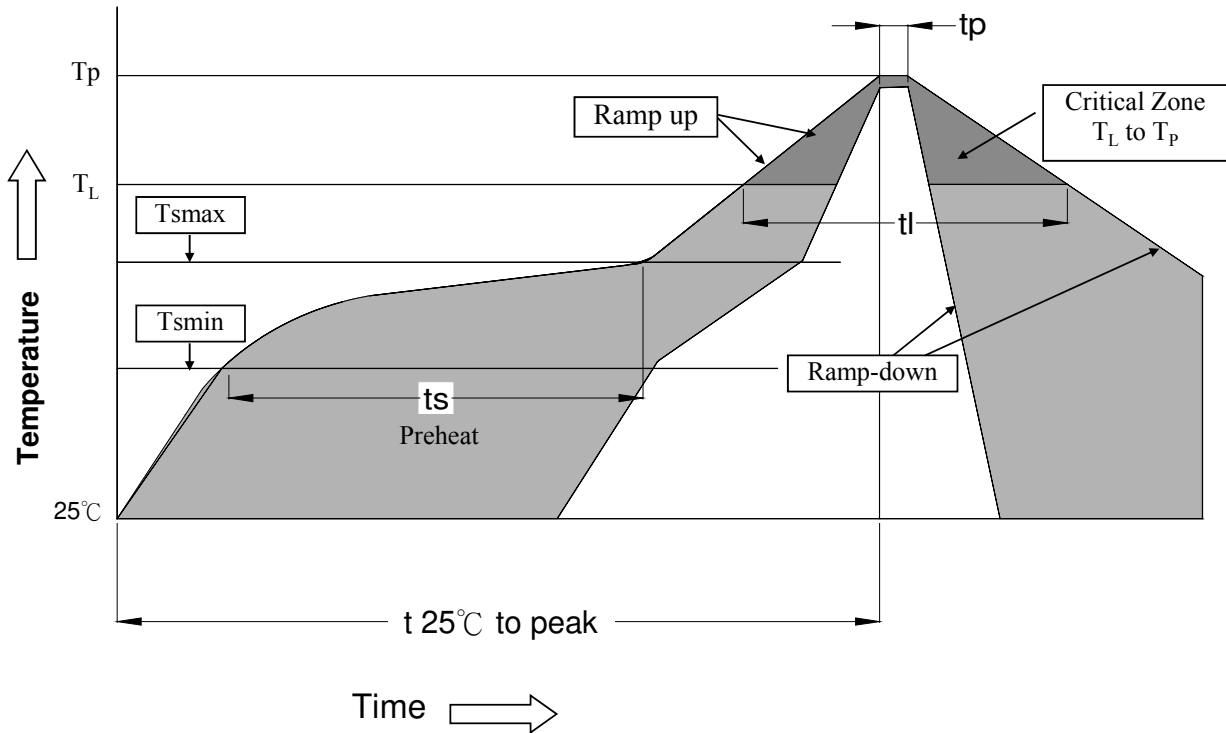
**MATERIAL LIST**
**Part No. G4818CG**
**E.BOM**

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

**RECOMMENDED SOLDERING PROFILE**

**Part No. G4818CG**

**a. RECOMMENDED REFLOW SOLDERING PROFILE:**



$T_L = 217^\circ\text{C}$

$T_p = 245^\circ\text{C}$

$t_s = 60-180\text{s}$      $T_{s\ max} = 200^\circ\text{C}$      $T_{s\ min} = 150^\circ\text{C}$

$t_L = 60-150\text{s}$      $t_p = 20-40\text{s}$      $T_{25^\circ\text{C to peak}} = 8\text{min max}$

Ramp up rate =  $3^\circ\text{C/s max}$

Ramp down rate =  $6^\circ\text{C/s max}$

\*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:  $\leq 30^\circ\text{C}/85\% \text{ RH}$