■ Part Number (Ordering Code)

ECAN	0602	B	2450
(1)	(2)	(3)	(4)

(1) Series Code

G&T Chip ANtenna

(2) Dimension L × W × T (mm) : Refer to Shape & Dimension

The first two digits : length (mm)
The second two digits : width (mm)

(3) Packing Code

Code	B	T
Packing Type	Bulk Packing	Tape Packing

(4) Center frequency(MHz)

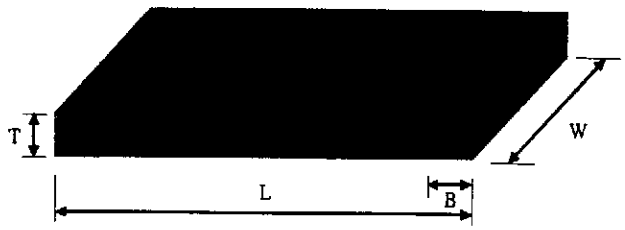
■ Features

(1) Small size and light weight
(2) Wide frequency range
(3) Low profile
(4) Available in reel packing for SMD Machine
(5) High stability in Temperature / Humidity change
(6) Free impedance matching
(7) Multilayer LTCC Technology

■ Applications

(1) Laptop PCs
(2) Mobile or Desktop PCs
(3) Printers
(4) Audio equipment
(5) Toys
(6) Network access points
(7) Instruments
(8) Automotive systems
(9) W-LAN

■ Shape & Dimension



P/N	L	W	T	B
1305	13.0±0.2	4.5±0.2	1.2±0.1	0.4±0.1
0602	6.5±0.2	2.2±0.2	1.0±0.1	0.4±0.1

■ Specifications

TYPE	ECAN1305B2450	ECAN0602B2450
Dimensions(㎜)	13.0×4.5×1.2	6.5×2.2×1.0
Operating Freq.(㎒)	2,400~2,488	2,400~2,488
Operating Temp.(℃)	-25~85	-25~85

■ Electrical performance

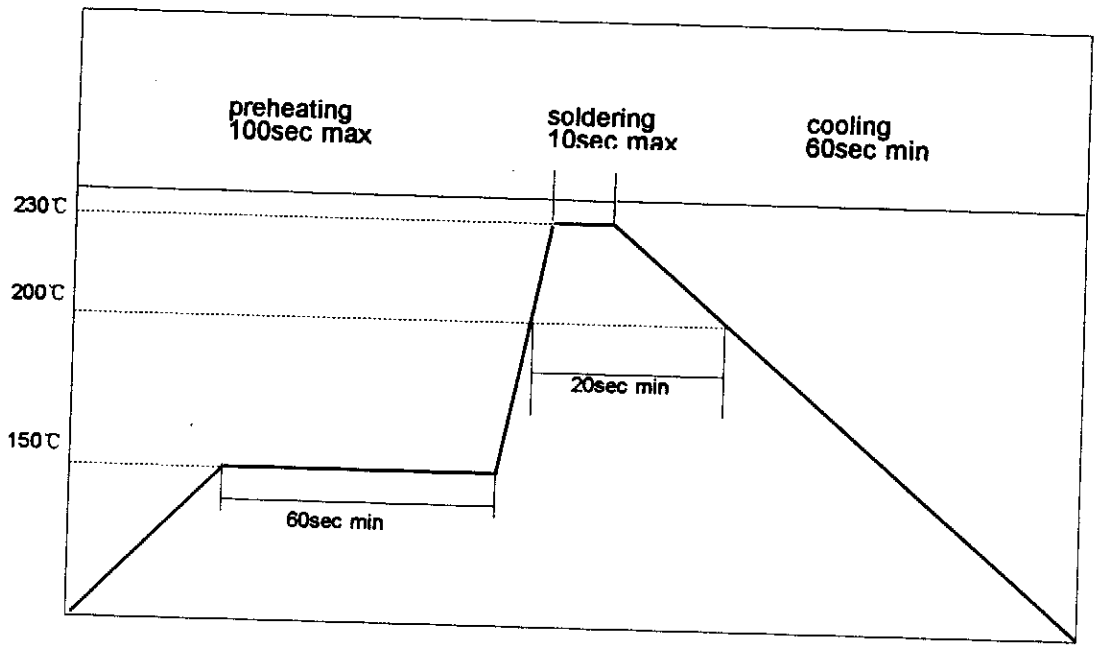
TYPE	ECAN1305B2450	ECAN0602B2450
Polarized wave	Linear	Linear
Center frequency	2,450 MHz	2,450 MHz
Bandwidth	160.0 MHz	180.0 MHz
Gain(max./min.)	2/-5 dBi	0.8/-6.5 dBi
Impedance	50 Ω	50 Ω

■ Performance Specification

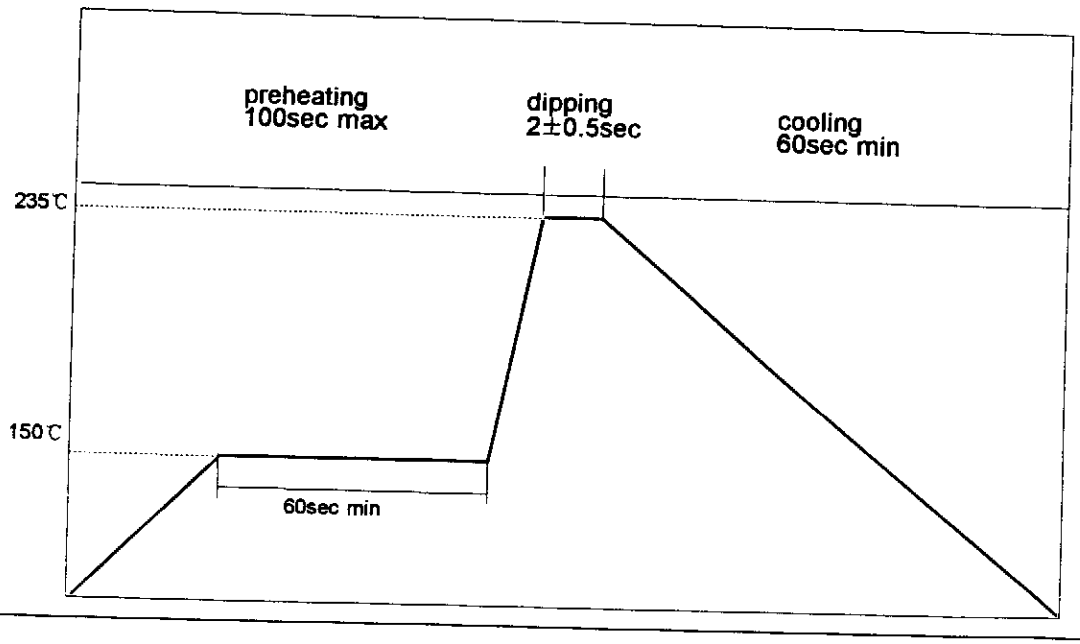
<table>
<tr><th>ITEM</th><th>REQUIREMENT</th><th>TEST CONDITION</th></tr>
<tr><td>Operating temp.range</td><td>-25℃~85℃</td><td></td></tr>
<tr><td>Solderability</td><td>More than 90% of the terminal electrode shall be covered with new solder.</td><td>- Preheat Temperature : 100 ~ 150℃
- Preheat Time : 1min
- Solder Temperature : 230 ± 5℃
- Dipping Time : 4 ± 1sec</td></tr>
<tr><td>Resistance to solder heat</td><td>1. No damage such as cracks should be caused in chip element.
2. More than 75% of the terminal electrode shall be covered with new solder.
3. No mechanical damage</td><td>- Preheat Temperature : 150 ± 10℃
- Preheat Time : 1 ~ 2min
- Solder Temperature : 260 ± 5℃
- Dipping Time : 10 ± 1sec</td></tr>
<tr><td>Reflow soldering</td><td>1. More than 50% of the terminal electrode shall be covered with new solder.
2. No mechanical damage
S≥T*0.5
  </td><td>- Preheat Temperature : 150℃
- Preheat Time : 1min
- Solder Temperature : 230℃
- Solder Time : 10sec. max
* Refer to Reflow soldering profile</td></tr>
<tr><td>Humidity resistance</td><td>1. No mechanical damage
2. Samples shall satisfy electrical performance(initial value±10%)</td><td>- Humidity condition : 82% ~ 87% R.H.
- Humidity Temperature : 85 ± 5℃
- Humidity Time : 1000 ± 12 hours.
- Measured at room ambient temperature after placing for 24 hours</td></tr>
<tr><td>Temperature cycle</td><td>1. No mechanical damage
2. Samples shall satisfy electrical performance(initial value±10%)</td><td>- The cycle is repeated 5 times.
<table><tr><th>Step</th><th>Temperature(℃)</th><th>Time(min)</th></tr><tr><td>1</td><td>-55</td><td>30</td></tr><tr><td>2</td><td>25</td><td>3</td></tr><tr><td>3</td><td>125</td><td>30</td></tr><tr><td>4</td><td>25</td><td>3</td></tr></table></td></tr>
<tr><td>Drop</td><td>1. No mechanical damage</td><td>- Height : 1 m
- Direction : 3 directions
- 3 times for each direction</td></tr>
</table>

■ Soldering Profile

1. REFLOW SOLDERING

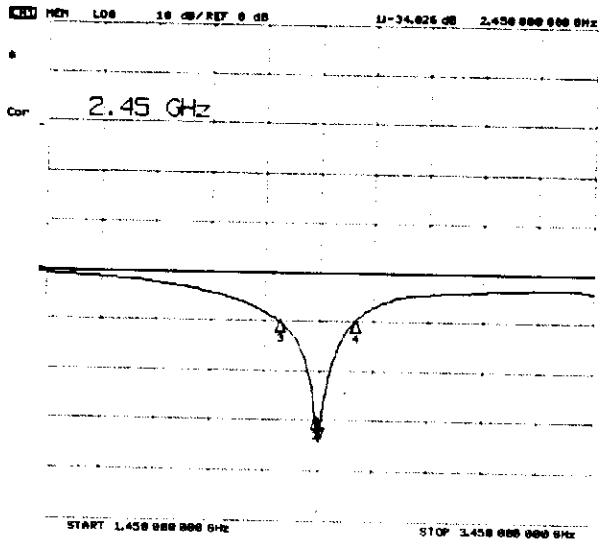


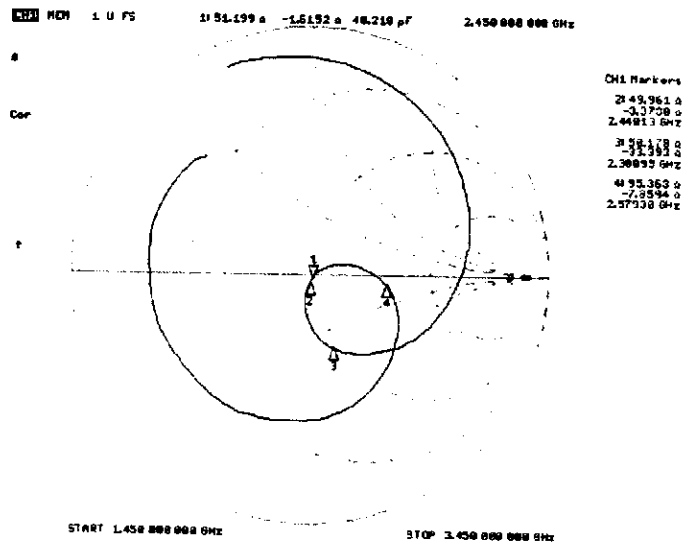
2. FLOW SOLDERING



○ ECAN0602

■ The characteristics of Return Loss





■ The characteristics of Radiation Pattern