

DIELECTRIC ANTENNA ELEMENT FOR GPS

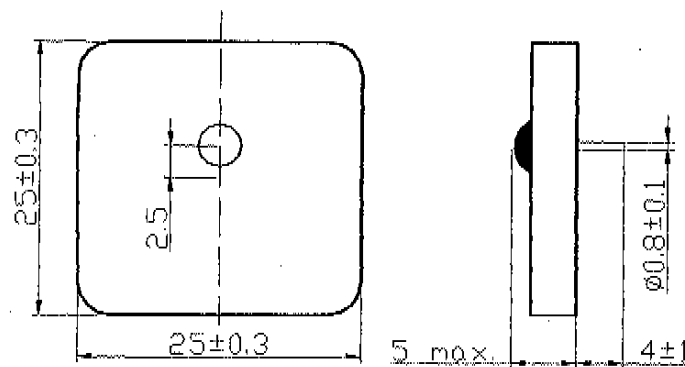
DAE1575A

Performance Characteristics

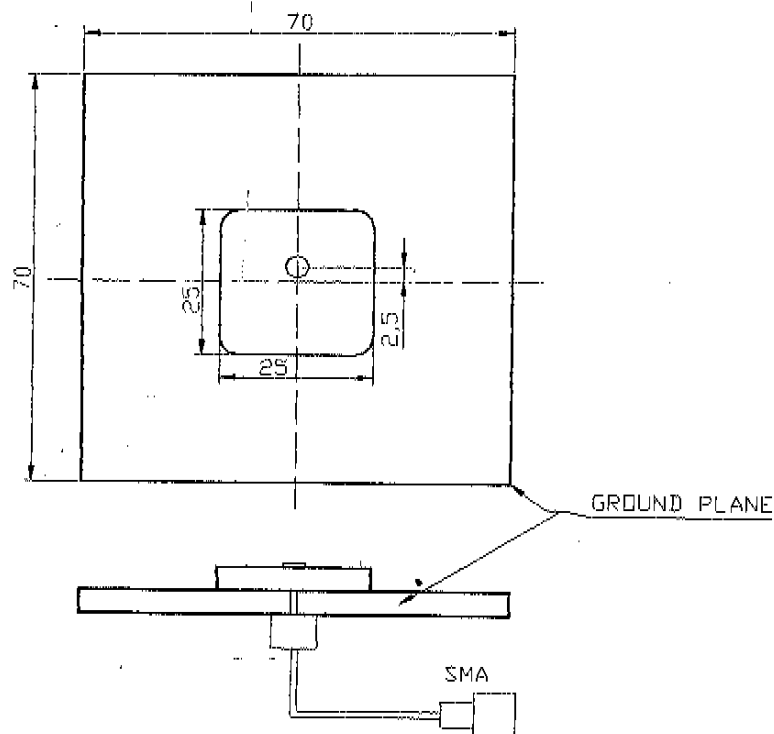
Part No.	Dimensions (mm)	Center Frequency (MHz)	Gain (dBi min.)	Axial Ratio (dB max.)	VSWR at 1575.42MHz (max.)
DAE1575A	25×25×4	1582±3.0	2.0	4.0	2.0

Table 1

Component drawing



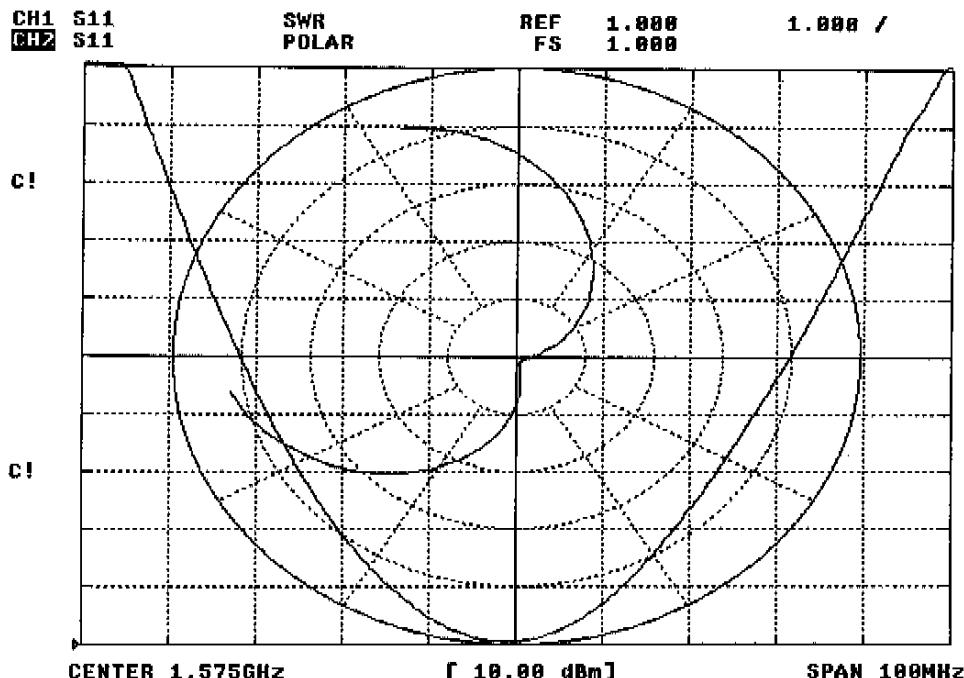
Testing jig



DIELECTRIC ANTENNA ELEMENT FOR GPS

DAE1575A

Impedance Characteristic

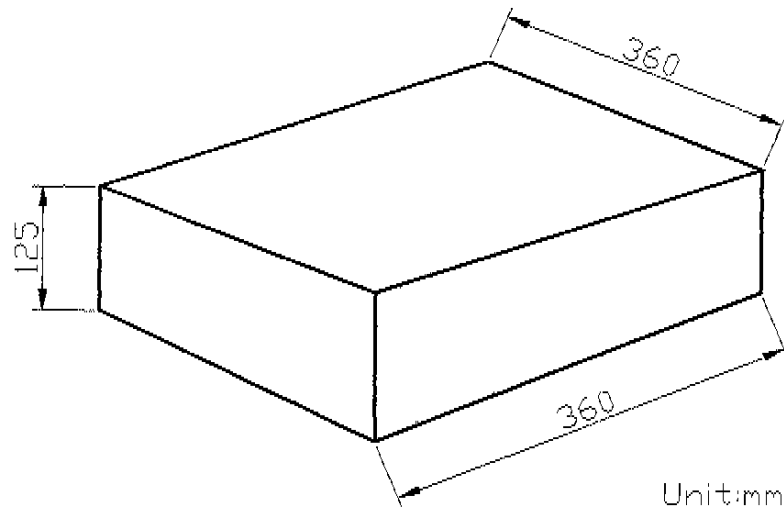
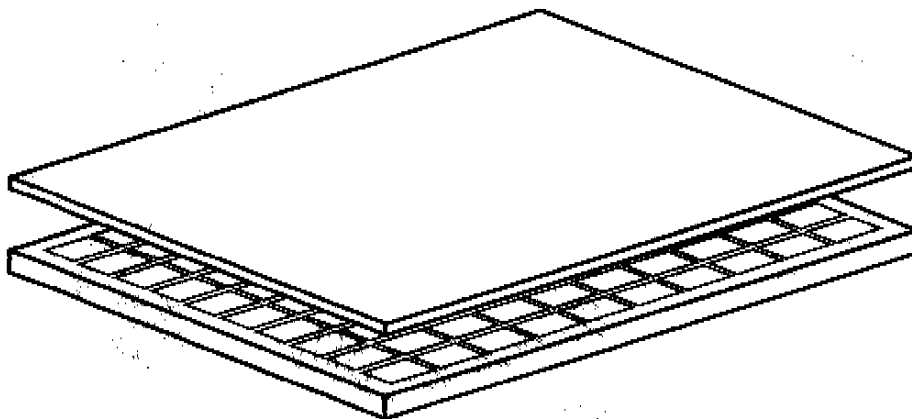


Environmental

- **Operating Temperature Range**
At the temperature range from -40°C to $+105^{\circ}\text{C}$, the device shall satisfy the specification in Table 1.
- **High Temperature Resistance**
The device shall satisfy the specification in Table 1 after leaving at $+105^{\circ}\text{C}$ for $96 \pm 2/-0$ hours, provided it would be measured after $2 \pm 2/-0$ hour leaving in $25 \pm 5^{\circ}\text{C}$ and less than 65% relative humidity.
- **Low Temperature Resistance**
The device shall satisfy the specification in Table 1 after leaving at -40°C for $96 \pm 2/-0$ hours, provided it would be measured after $2 \pm 2/-0$ hour leaving in $25 \pm 5^{\circ}\text{C}$ and less than 65% relative humidity.
- **Humidity Resistance**
The device is subjected to 90~95% relative humidity at $60 \pm 3^{\circ}\text{C}$ for $96 \pm 2/-0$ hours, Then dry out at $25 \pm 5^{\circ}\text{C}$ and less than 65% relative humidity for $2 \pm 2/-0$ hours. After dry out the device shall satisfy the specification in Table 1.
- **Vibration Resistance**
The device is subjected to vibration of 2 sweeps in each of three mutually perpendicular plane. Frequency shall be varied within 10~55Hz with 1.5mm double amplitude. Sweep time of frequency shall be 15 minutes. The device shall satisfy the specification in Table 1 after the test.

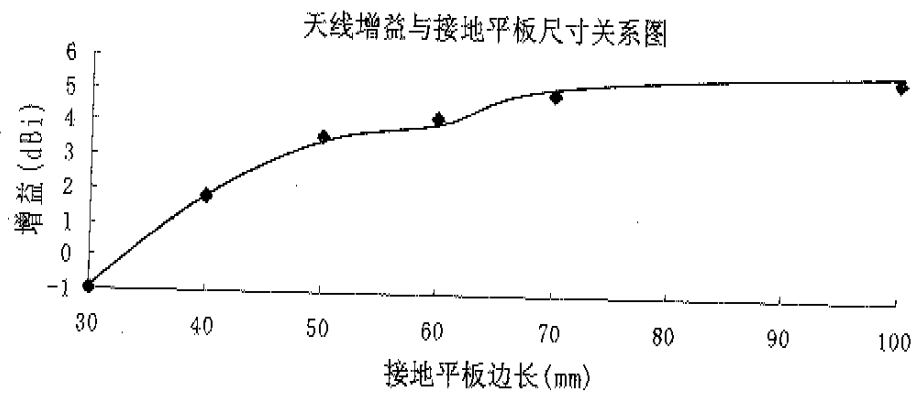
DIELECTRIC ANTENNA ELEMENT FOR GPS**DAE1575A****Soldering Condition**

Recommended soldering conditions: 350°C max, 10s max.

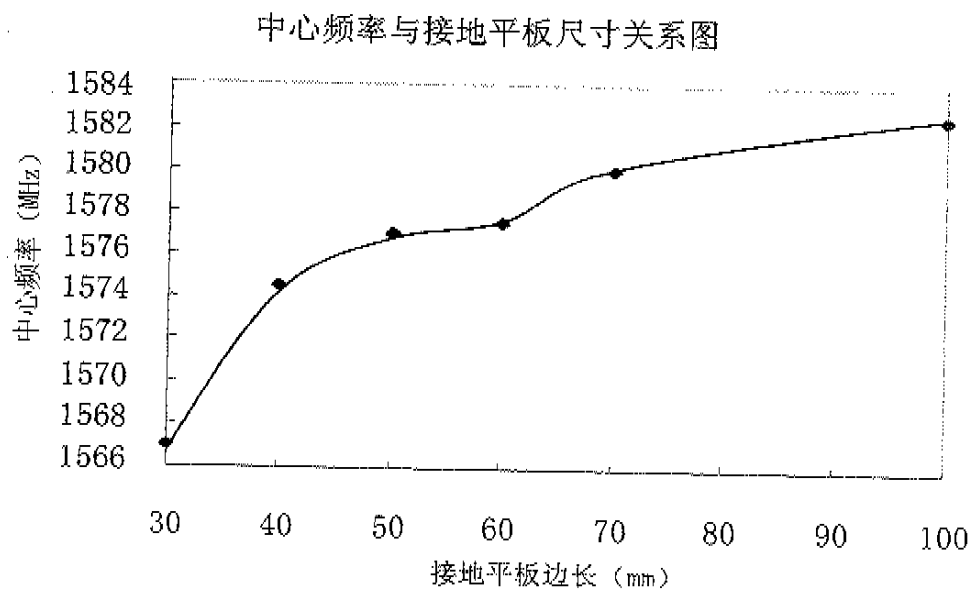
Packing and package**Outer package****Inner package**

Quantity: 500 pcs/box

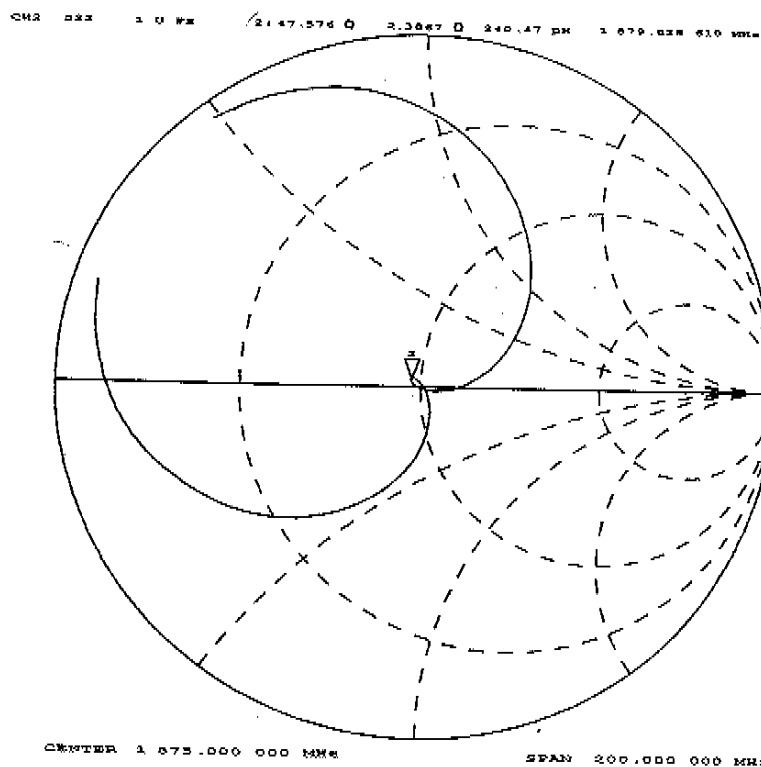
一、天线增益与接地平板尺寸关系图:



二、中心频率与接地平板尺寸关系图:

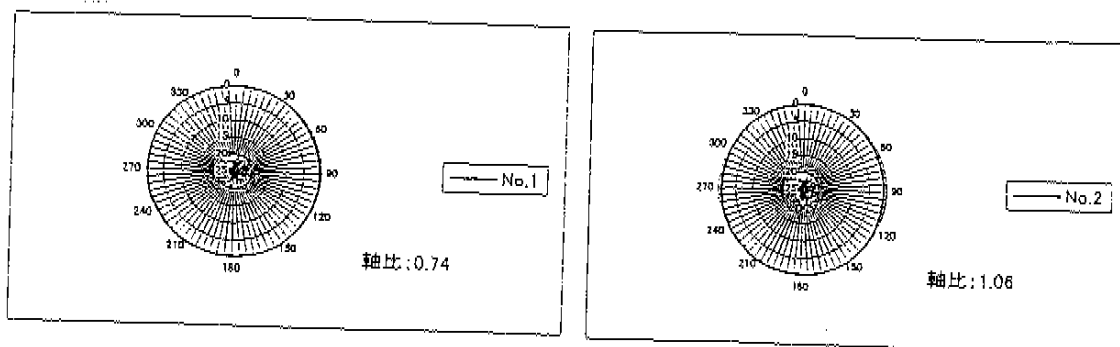


三、Smith Chart :



四、轴比图 (Axial Ratio):

轴比 at 1580.5 MHz



DIELECTRIC ANTENNA ELEMENT FOR GPS

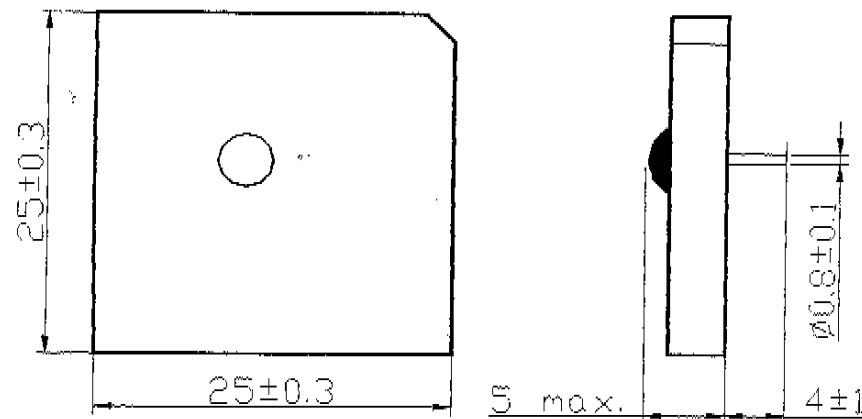
DAE1575B

Performance Characteristics

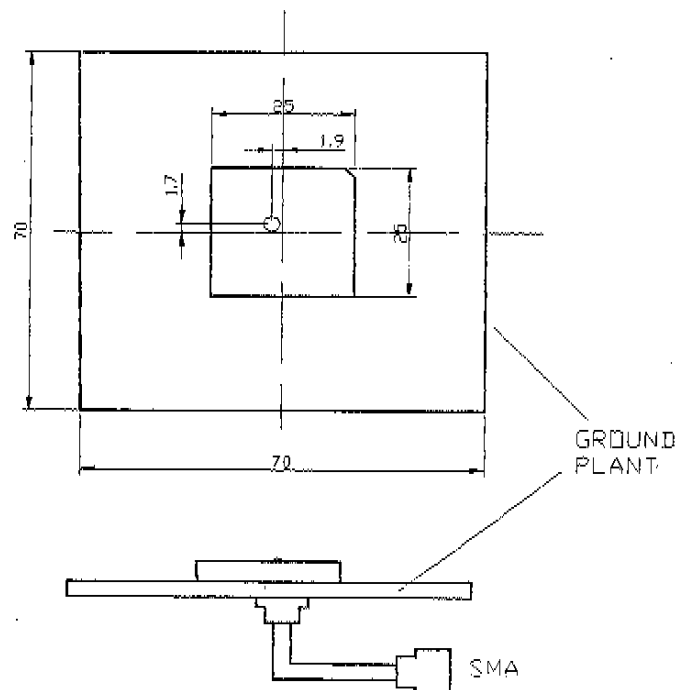
Part No.	Dimensions (mm)	Center Frequency (MHz)	Gain (dBi min.)	Axial Ratio (dB max.)	VSWR at 1575.42MHz (max.)
DAE1575B	25×25×4	1575.42±3	2.0	4.0	2.0

Table 1

Component drawing



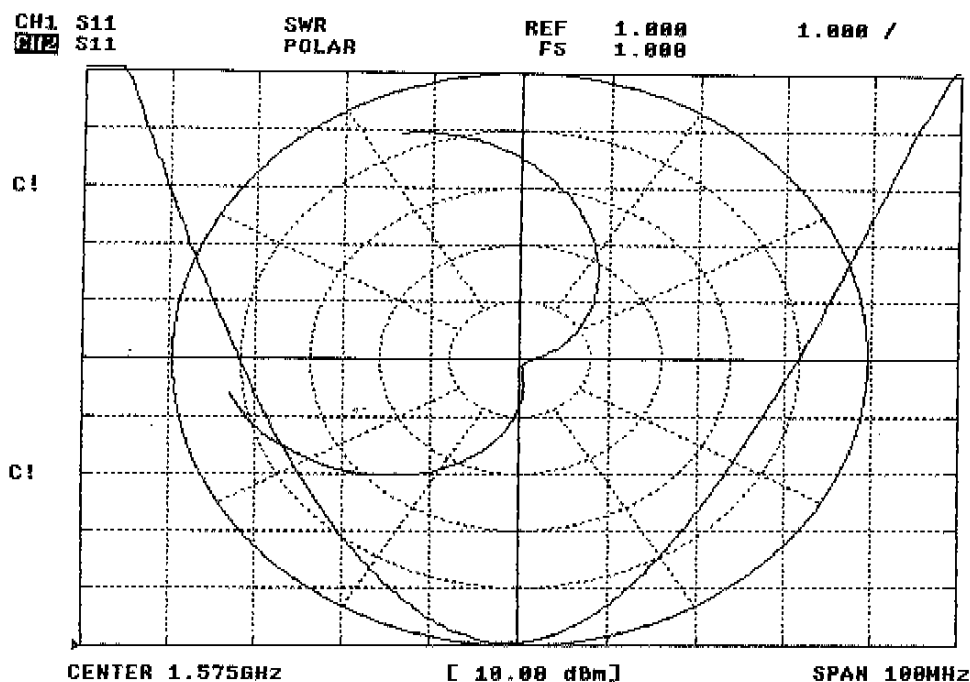
Testing jig



DIELECTRIC ANTENNA ELEMENT FOR GPS

DAE1575B

Impedance Characteristic



Environmental

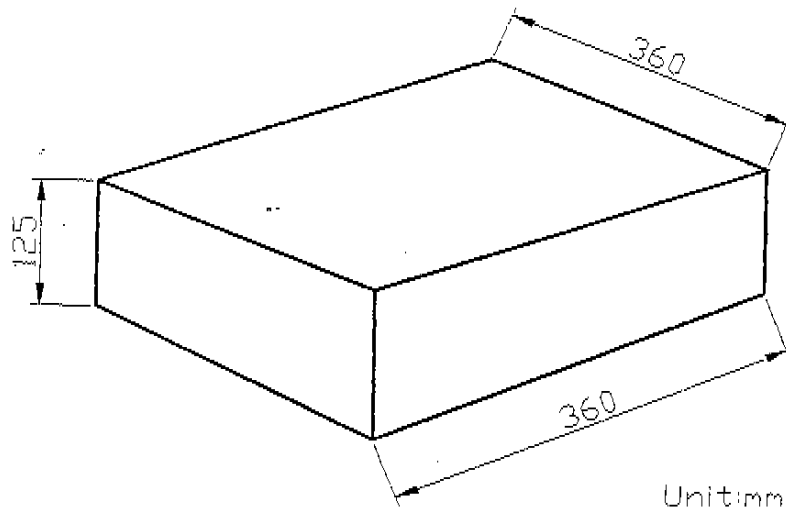
- Operating Temperature Range
At the temperature range from -40°C ~ $+105^{\circ}\text{C}$, the device shall satisfy the specification in Table 1.
- High Temperature Resistance
The device shall satisfy the specification in Table 1 after leaving at $+105^{\circ}\text{C}$ for $96 \pm 2/-0$ hours, provided it would be measured after $2 \pm 2/-0$ hour leaving in $25 \pm 5^{\circ}\text{C}$ and less than 65% relative humidity.
- Low Temperature Resistance
The device shall satisfy the specification in Table 1 after leaving at -40°C for $96 \pm 2/-0$ hours, provided it would be measured after $2 \pm 2/-0$ hour leaving in $25 \pm 5^{\circ}\text{C}$ and less than 65% relative humidity.
- Humidity Resistance
The device is subjected to 90~95% relative humidity at $60 \pm 3^{\circ}\text{C}$ for $96 \pm 2/-0$ hours. Then dry out at $25 \pm 5^{\circ}\text{C}$ and less than 65% relative humidity for $2 \pm 2/-0$ hours. After dry out the device shall satisfy the specification in Table 1.
- Vibration Resistance
The device is subjected to vibration of 2 sweeps in each of three mutually perpendicular plane. Frequency shall be varied within 10~55Hz with 1.5mm double amplitude. Sweep time of frequency shall be 15 minutes. The device shall satisfy the specification in Table1 after the test.

DIELECTRIC ANTENNA ELEMENT FOR GPS**DAE1575B****Soldering Condition**

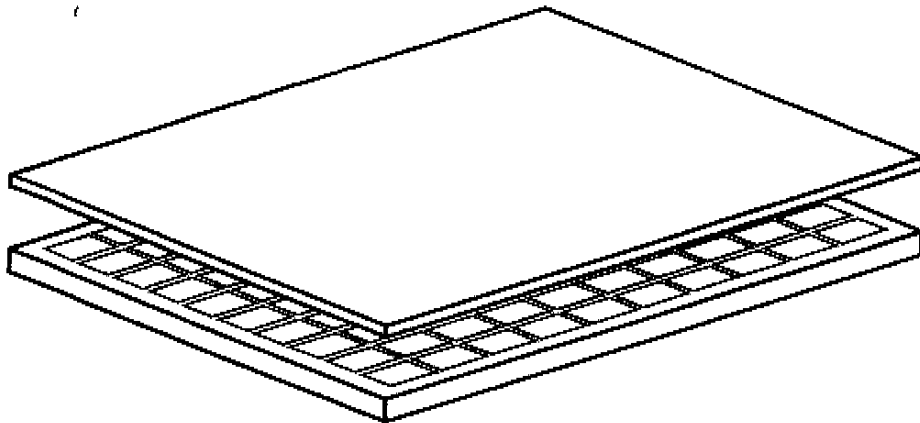
Recommended soldering conditions: 350°C max, 10s max.

Packing and package

Outer package



Inner package



Quantity: 500 pcs/box