

Chip Antennas

PRECAUTIONS

1. PCB Design

Precautions	<p>◆ Land pattern design Please do not arrange the surface and inside layer pattern near the antenna mounting area.</p>
Technical Considerations	<p>◆ Land pattern design (Land pattern dimension examples and recommended antenna land pattern)</p>
	<div style="display: flex; justify-content: space-around;"> <div style="width: 45%;"> <p>TSA5N18D</p> </div> <div style="width: 45%;"> <p>TSA5NA2K</p> </div> </div>
	<div style="display: flex; justify-content: space-around;"> <div style="width: 45%;"> <p>TSA6NA4L</p> </div> <div style="width: 45%;"> <p>TSA3NA4L</p> </div> <div style="width: 45%;"> <p>TSA5NA6L</p> </div> </div>
	<p>Legend:</p> <ul style="list-style-type: none"> ■ Land for input terminal ■ Land for GND terminal □ Land for NC terminal
	<p>Unit : mm</p>

2. Soldering

Technical Considerations	<p>◆ Conditions of Reflow soldering (for reference)</p> <ul style="list-style-type: none"> • Pb Free Reflow Profile <div style="display: flex; align-items: flex-start;"> <div style="flex: 1;"> </div> <div style="flex: 1; padding-left: 20px;"> <p>※ Components should be preheated to within 100 to 130°C from soldering temperature.</p> <p>※ Assured to be reflow soldering for 2 times.</p> <p>Note : The above profiles are the maximum allowable soldering condition, therefore these profiles are not always recommended.</p> </div> </div>
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3. Storage Conditions

Precautions

◆ Storage conditions

1. The Products must not be used in the following environments :

- exposure to special gases such as (C12, NH3, SOx, NOx)
- exposure to volatile gas or inflammable gas
- exposure to a lot of dust
- exposure to water or condensation
- exposure to direct sunlight or freezing

2. The Products should be kept in the following conditions :

- Temperature : $-10\sim+40^{\circ}\text{C}$
- Humidity : 15~85%RH max.

3. The products should be used within 6 months after delivery. In case of storage over 6 months, solderability shall be checked before actual usage.

■ Please contact our offices for further details of specifications.

All of the standard values listed here are subject to change without notice due to technical improvements.

Therefore, please check the specifications carefully before use.