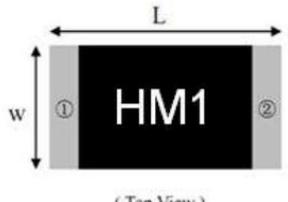
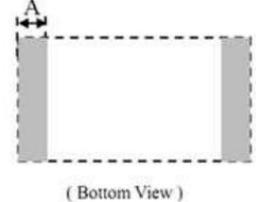
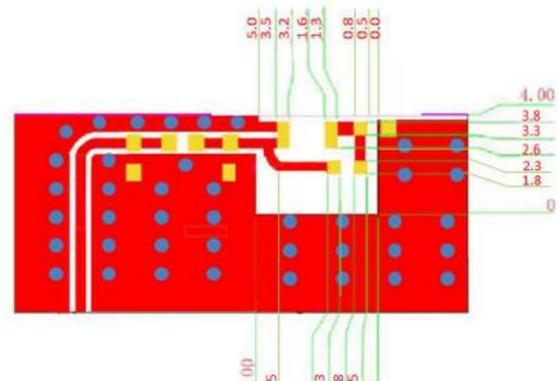
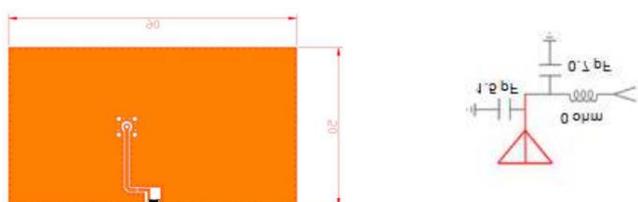
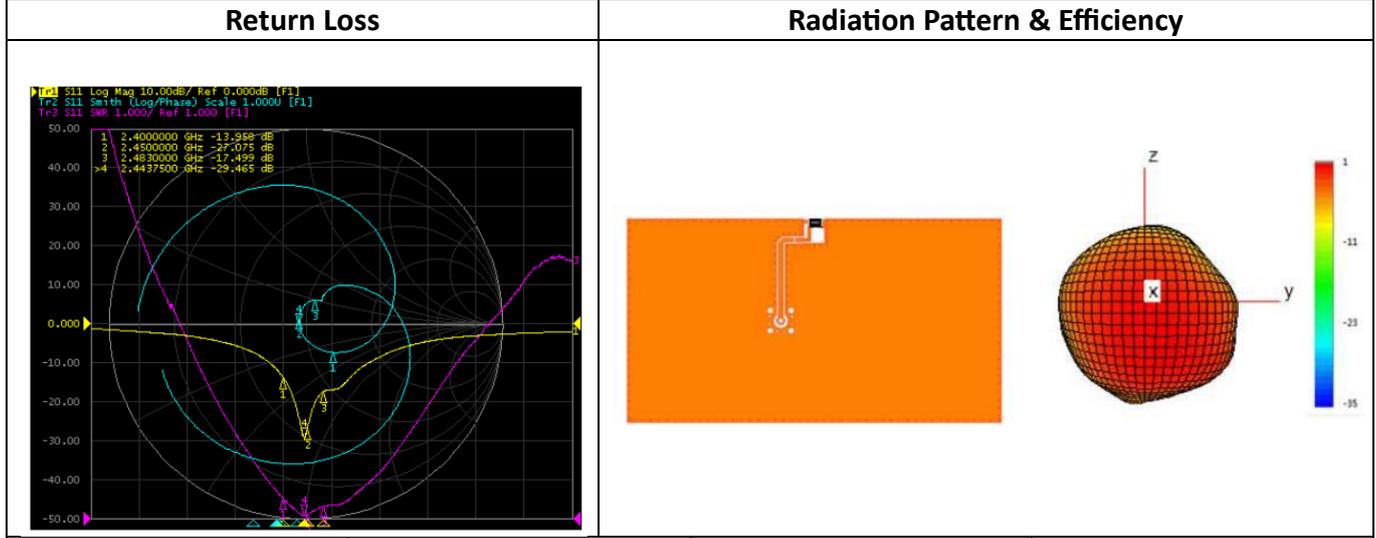


Electrical Specification		
Parameter	Value	Unit
Central Frequency	2450	MHz
Bandwidth	100 (Min.)	MHz
V.S.W.R	≤2.0	-
Peak Gain	3.12	dBi
Impedance	50	Ω
Operating Temperature	-40 to +85	°C
Polarization	Linear	
Azimuth Beamwidth	Omni-directional	

AKPKH-2012-HM1									
Component dimensions									
 <p>(Top View)</p>		<table border="1"> <thead> <tr> <th>Number</th> <th>Terminal Name</th> </tr> </thead> <tbody> <tr> <td>①</td> <td>INPUT</td> </tr> <tr> <td>②</td> <td>NC</td> </tr> </tbody> </table>		Number	Terminal Name	①	INPUT	②	NC
Number	Terminal Name								
①	INPUT								
②	NC								
 <p>(Bottom View)</p>		 <p>(Side View)</p>							
L (mm)	W (mm)	T (mm)	A(mm)						
2.0±0.2	1.2±0.2	0.5±0.1	0.3±0.2						
Application: For Miniaturized Bluetooth System									

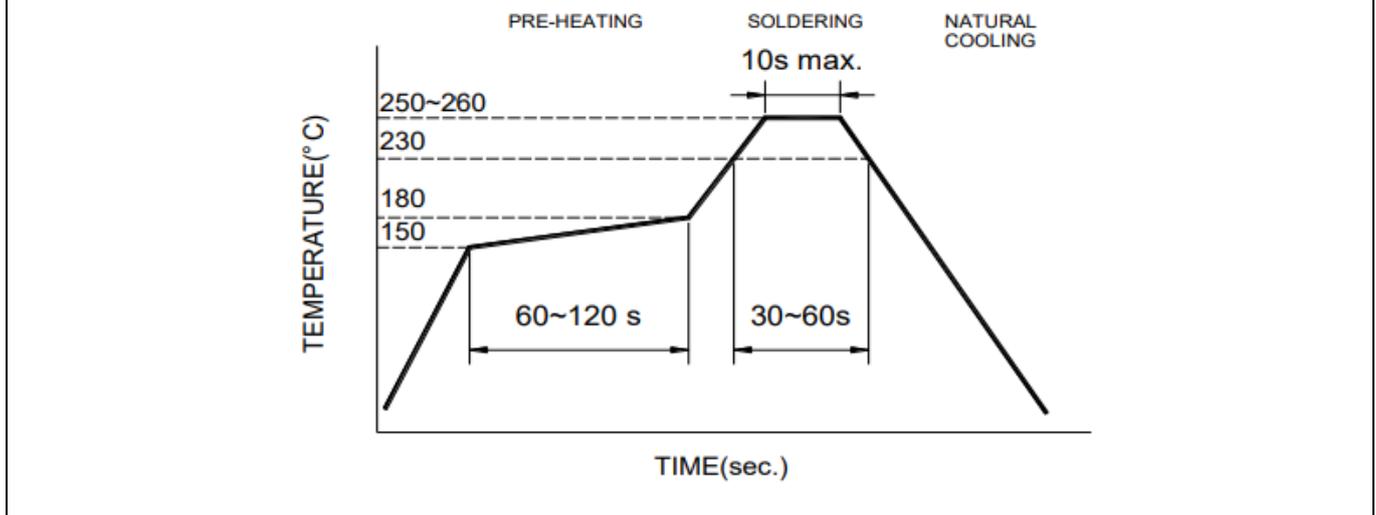
Recommended PCB Pattern	
PCB Layout (Unit : mm)	Evaluation Board Size and Matching Circuits
	

Measurement Results



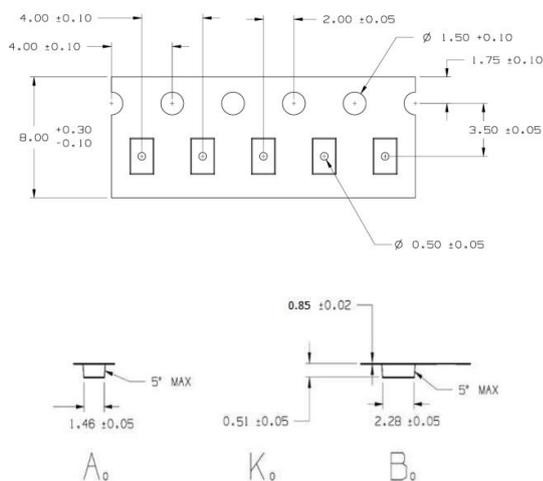
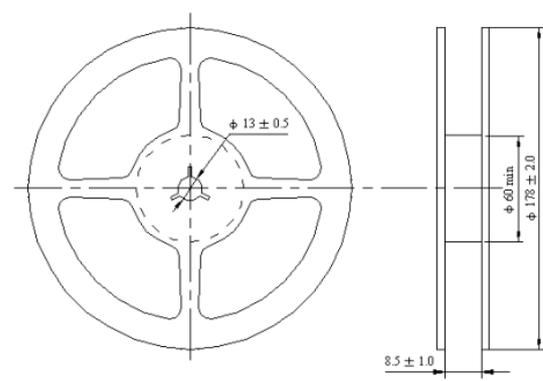
Freq.(MHz)	Efficiency(dB)	Efficiency(%)	Gain (dBi)
2400	-2.22	60	2.75
2450	1.87	65	3.12
2500	-2.08	62	3.01

Reflow Soldering Standard Condition



Dependability Test		
Item	Specification	Test Condition
Solderability IEC 60068-2-58 GB/T2423.28	At least 95% of a surface of each terminal electrode must be covered by fresh solder	*Solder bath temperature : 240±5°C *Immersion time : 2±0.5 sec Solder : Sn96.5Ag3.0Gu0.5 for lead-free.
Leaching (Resistance to dissolution of metallization) JIS C5101	Loss of metallization on the edges of each electrode shall not exceed 25%.	*Solder bath temperature : 260±5°C *Leaching immersion time : 10±1 sec Solder : Sn96.5 Ag3.0 Gu0.5 for lead-free.
Resistance to soldering heat IEC 60068-2-58 GB/T2423.28	No mechanical damage. Electrical specification shall satisfy the descriptions in electrical characteristics at the room temperature. Loss of metallization on the edges of each electrode shall not exceed 25%.	*Preheating temperature : 120~150°C, 1 minute. *Solder temperature : 260±5°C *Immersion time : 10±1 sec Solder : Sn96.5Ag3.0Gu0.5 for lead-free Measurement to be made after keeping at room temperature for 24±2 hrs.
Drop Test IEC 60068-2-32 GB/T2423.8 Customer's specification.	No mechanical damage. Electrical specification shall satisfy the descriptions in electrical characteristics at the room temperature.	*Height : 50 cm *Test Surface: Rigid surface of concrete or steel. *Times : 6 surfaces for each units ; 2 times for each side
Vibration IEC 60068-2-6 GB/T 2423.10	No mechanical damage. Electrical specification shall satisfy the descriptions in electrical characteristics at the room temperature.	*Frequency : 10Hz~55Hz~10Hz(1min) *Total amplitude : 1.5mm *Test times : 6hrs.(Two hrs each in three mutually perpendicular directions)
Adhesive Strength of Termination IEC60068-2-21 GB/T 2423.6	No remarkable damage or removal of the termination.	*Pressurizing force : 5N(≤0603) ; 10N(>0603) *Test time:10±1 sec
Bending test IEC 60068-2-21 GB/T 2423.29	No mechanical damage. Electrical specification shall satisfy the descriptions in electrical characteristics at the room temperature.	The middle part of substrate shall be pressurized by means of the pressurizing rod at a rate of about 1 mm/s per second until the deflection becomes 2mm and then pressure shall be maintained for 10±1 sec. Measurement to be made after keeping at room temperature for 24±2 hours.
Temperature cycle IEC60068-2-14 GB/T 2423.22	No mechanical damage. Electrical specification shall satisfy the descriptions in electrical characteristics at the room temperature.	30 minutes at-40°C±2°C. 10~15 minutes at room temperature. 30minutes at +85°C±2°C. 10~15 minutes at room temperature. Total 100 continuous cycles Measurement to be made after keeping at room temperature for 24±2 hrs.
High temperature IEC 60068-2-2 GB/T2423.2	No mechanical damage. Electrical specification shall satisfy the descriptions in electrical characteristics.	*Temperature : 85±2°C. *Test duration : 500+24/-0 hours. Measurement to be made after keeping at room temperature for 24±2 hrs.
Humidity (steady conditions) IEC60068-2-3 GB/T 2423.3	No mechanical damage. Electrical specification shall satisfy the descriptions in electrical characteristics at the room temperature.	*Humidity : 85±5%R.H. *Temperature : 85±2°C. *Time : 500+24/-0 hrs. Measurement to be made after keeping at room temperature for 24±2 hrs * 200hrs measuring the first data then 300hrs data.

<p>Low temperature IEC 60068-2-1 GB/T2423.1</p>	<p>No mechanical damage. Electrical specification shall satisfy the descriptions in electrical characteristics at the room temperature.</p>	<p>*Temperature : $-40\pm 2^{\circ}\text{C}$. *Test duration : $500+24/-0$ hours Measurement to be made after keeping at room temperature for 24 ± 2 hrs.</p>
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Packaging and Dimensions	
Plastic Tape	Reel
	

Remarks for Package

- Reserve a length of 150~200mm for the trailer of the carrier and 250~300 mm for the leader of the carrier and further 250mm of cover tape at the leading part of the carrier.

Storage Period

- Oxidizable Material, 12 months in vacuum sealed bag, please repack within 168 hours by re-seal the package treatment after using.

Storage Temperature Range: <30 degree C, Humidity: 60%RH

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