SPECIFICATION

OF PRODUCTS

CUSTOMER : MICROS

PRODUCT NAME: DIELECTRIC ANTENNA ELEMENT

PART NUMBER : DAE1575R1820A

CUSTOMER P/N : ANT1575-1820F

Approved by	Checked by	Drawn by

Approval Sheet	
Customer	MICROS
Supplier P/N	DAE1575R1820A
Customer P/N	ANT1575-1820F

Customer's Approval Certificate	
Checked & Approved by	
Date	

Please return this copy as a certification of your approval.

1 SCOPE

This specification shall cover the characteristics of the dielectric antenna element with the type DAE1575R1820A .

2 PART NO.

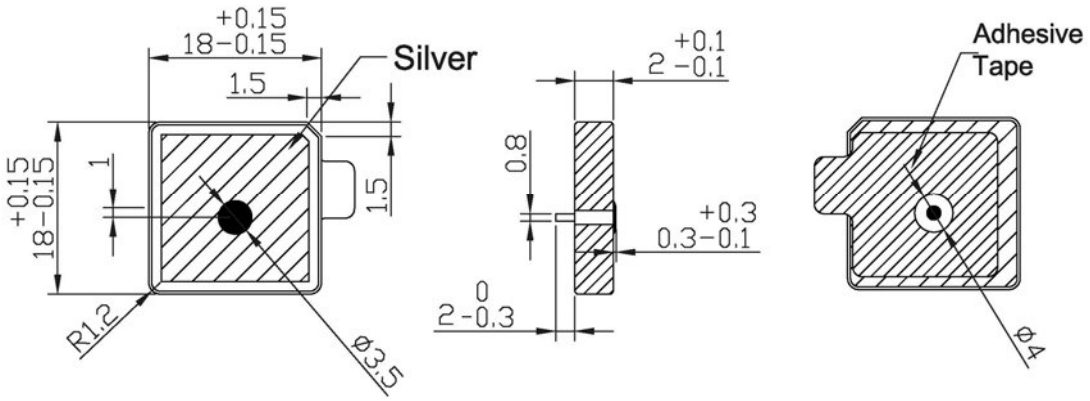
PART NUMBER	CUSTOMER PART NO	SPECIFICATION NO
DAE1575R1820A	ANT1575-1820F	

3 OUTLINE DRAWING AND DIMENSIONS

3.1 Appearance: No visible damage and dirt.

3.2 The products conform to the RoHS directive and national environment protection law.

3.3 Dimensions



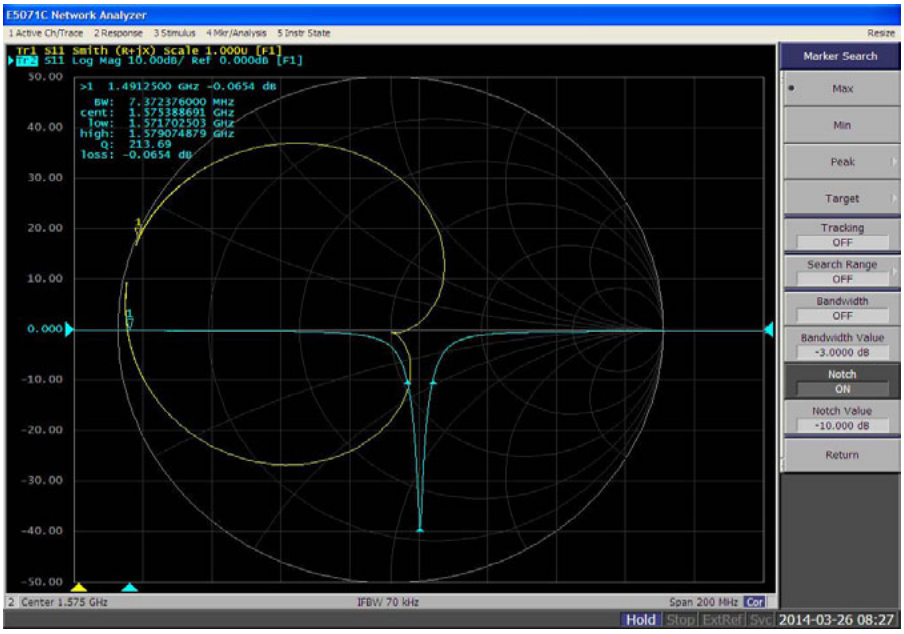
4 ELECTRICAL SPECIFICATIONS

4.1 Performance Characteristics

Items	Content
Nominal frequency	1575.42±1.023 （MHz）
Center frequency (with adhesive tape on 22 square ground Plane)	1577.5±2.5 （MHz）
-10dB Bandwidth min	4.5 （MHz）
VSWR at CF max	1.5
Polarization Model	RHCP
Impedance	50 （Ω）
Frequency Temperature Coefficient max	20（ppm/deg.℃）

* Center frequency :-10dB bandwidth center frequency. depend on the ground plane of customers.

4.2 Return loss Characteristic

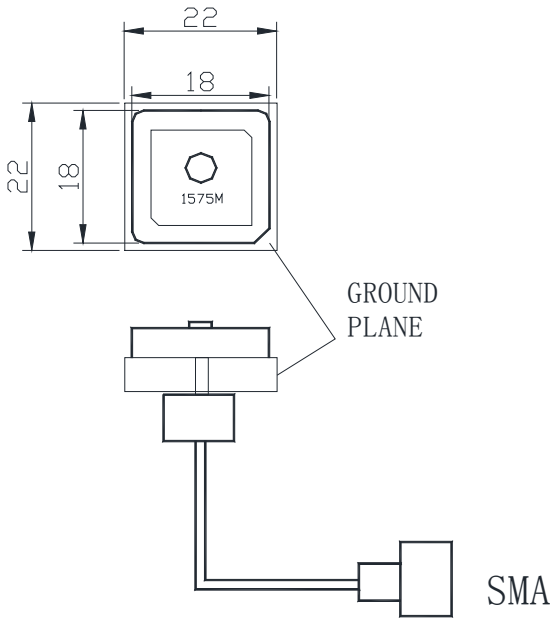


5 TEST

5.1 Test Conditions

Parts shall be measured under a condition (Temp.:20℃±15℃, Humidity : 65%±20% R.H.).

5.2 Test fixture



6 ENVIRONMENTAL TEST

No.	Item	Test Condition	Remark
6.1	Humidity Test	The device is subjected to 90%~95% relative humidity 60℃±3℃ for 96h~98h,then dry out at 25 ℃ ± 5 ℃ and less than 65% relative	It shall fulfill the specifications

		humidity for 2h~4h. After dry out the device shall satisfy the specification in table 1.	in Table 1.
6.2	High Temperature Exposure	The device shall satisfy the specification in table 1 after leaving at 105℃ for 96h~98h,provided it would be measured after 2h~4h leaving in 25 ℃ ± 5 ℃ and less than 65% relative humidity.	It shall fulfill the specifications in Table 1.
6.3	Low Temperature	The device shall satisfy the specification in table 1 after leaving at -40℃ for 96h~98h,provided it would be measured after 2h~4h leaving in 25℃ ±5 ℃ and less than 65% relative humidity.	It shall fulfill the specifications in Table 1.
6.4	Temperature Cycle	Subject the device to -40 ℃ for 30 min. followed by a high temperature of 105℃ for 30 min cycling shall be repeated 5 times. At the room temperature for 1h prior to the measurement.	It shall fulfill the specifications in Table 1.
6.5	Vibration	Subject the device to vibration for 2h each in x、y and z axis with the amplitude of 1.5mm, the frequency shall be varied uniformly between the limits of 10Hz~55Hz.	It shall fulfill the specifications in Table 1.
6.6	Soldering Test	Lead terminals are heated up to 350℃ ± 10℃ for 5s ± 0.5 s with brand iron and then element shall be measured after being placed in natural conditions for 1 h. No visible damage and it shall fulfill the specifications in Table 1	It shall fulfill the specifications in Table 1.
6.7	Solder ability	Lead terminals are immersed in soldering bath of 260℃~290℃ for 3s ± 0.5s . More than 95% of the terminal surface of the device shall be covered with fresh solder.	The terminals shall be at least 95% covered by solder.
6.8	Terminal Pressure Strength	Force of 2kg is applied to each lead in axial direction for 10s ± 1 s (see drawing). No visible damage and it shall fulfill the specifications in Fig 1	Mechanical damage such as breaks shall not occur.

FIG 1

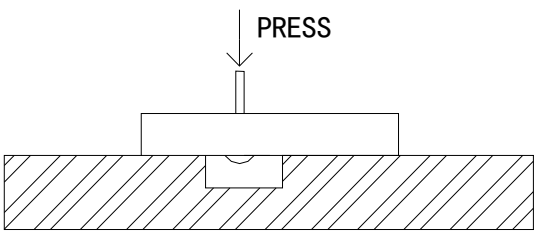


TABLE 1

Item	Specification After Test (MHz)
Center Frequency change	±2.0
-10dB Bandwidth Change	±2.0