



Features

- Higher Reliability
- SMT Process
- Meet RoHS Spec
- Thick/Thin Film and Newly Patent Process
- Higher Gain and Higher Radiation Efficiency



TYY-ZT5020-DJ-1 ----- Chip Antenna

Electrical Characteristics (@TA=25 °C Unless Otherwise Noted)

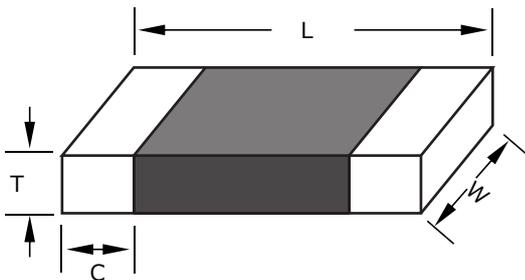
Parameter	Specification	Units
Frequency	2450	MHz
Bandwidth	100 (Min.)	MHz
*Peak Gain	2 dBi	dBi
*Peak Efficiency	76.80%	%
Impedance	50	Ω
Maximum Power	4	W
VSWR	≤ 2	
Polarization	Linear	

* Test condition: Test board size 98*65 mm; Matching circuit: Pi matching circuit will be required

Absolute Maximum Ratings

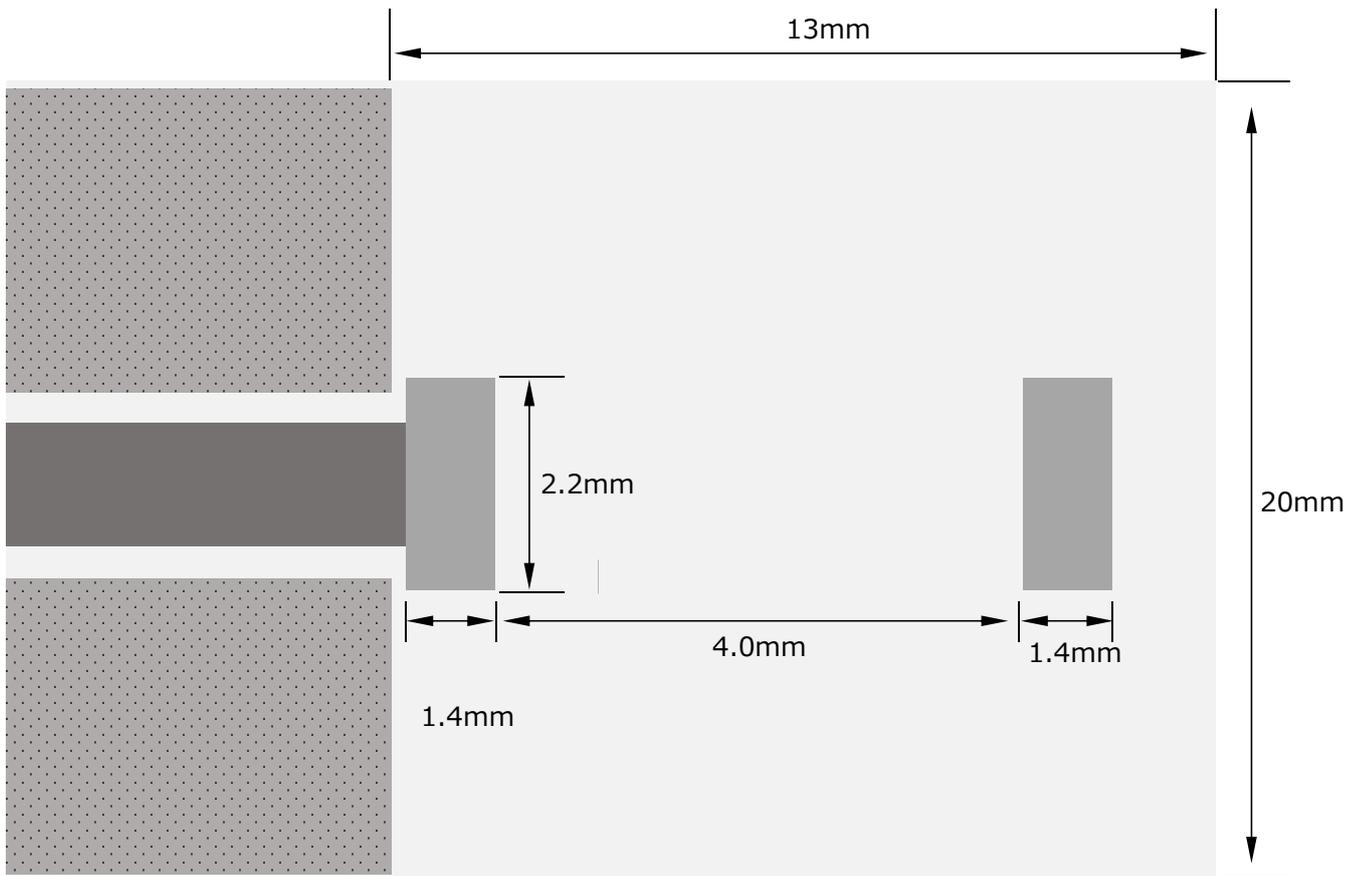
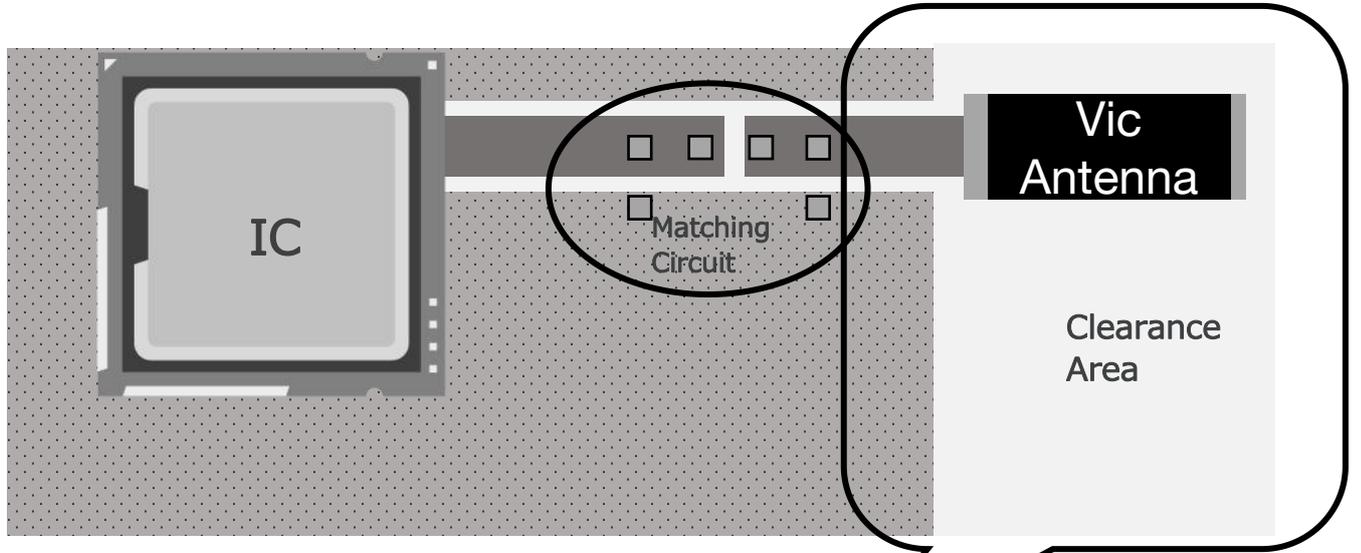
Parameter	Symbol	Value	Unit
Maximum Operating temperature	T_{OPER}	-40 to +90	$^{\circ}C$
Maximum Storage temperature	T_{STG}	-55 to +125	$^{\circ}C$
Maximum lead temperature for soldering during 10s	T_L	260	$^{\circ}C$

Product Dimension



Dimension	MM (INCHES)
L	5.0 ± 0.2 (0.197 ± 0.008)
W	2.0 ± 0.2 (0.079 ± 0.008)
T	0.72 ± 0.2 (0.029 ± 0.008)
C	0.5 ± 0.3 (0.02 ± 0.012)

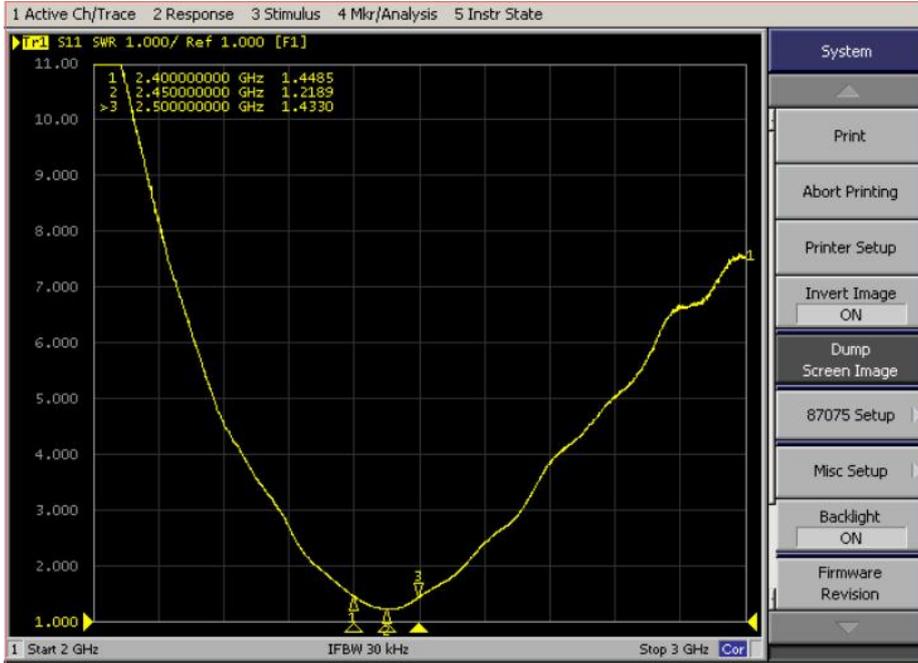
Recommended PCB layout





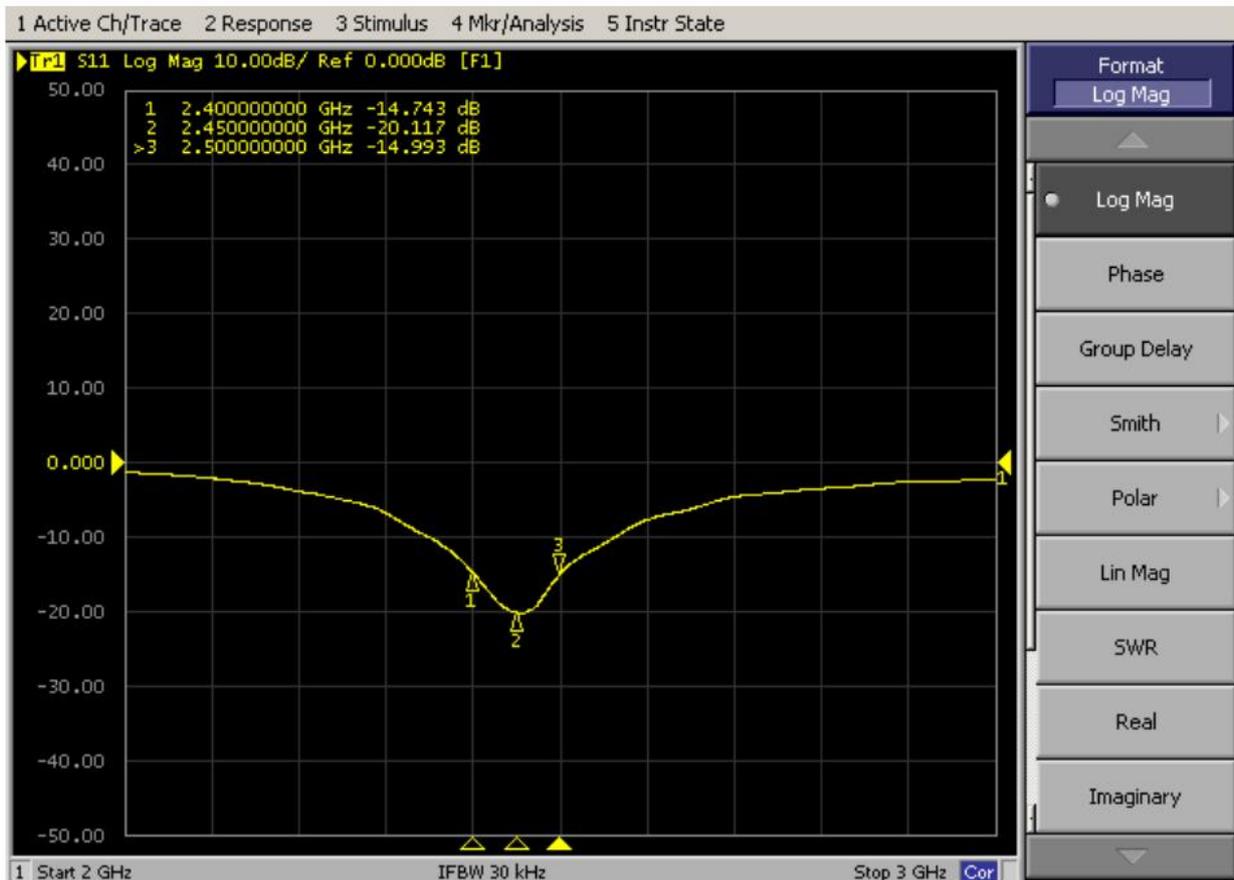
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Typical Characteristics



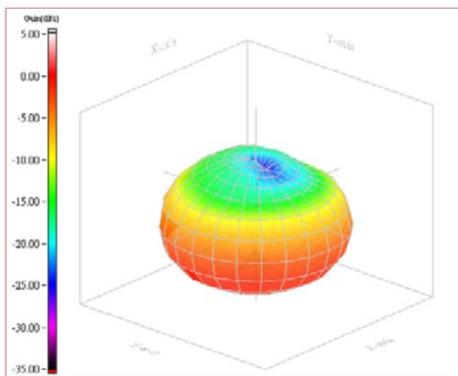
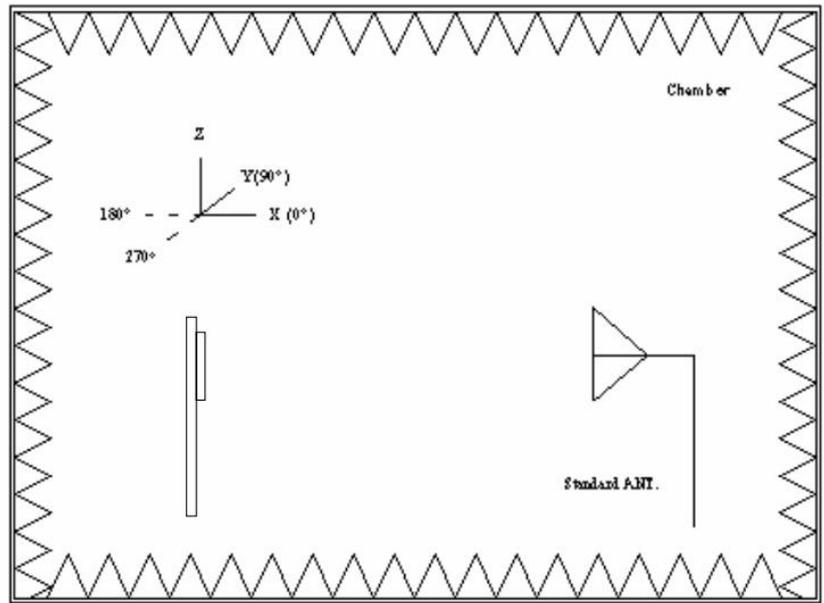
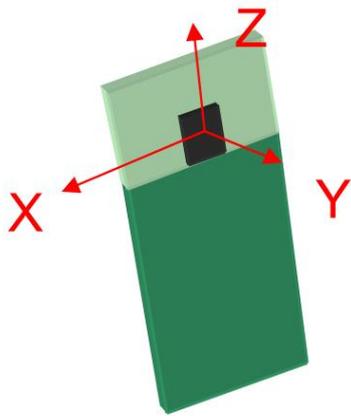
Mark	Frequency	VSWR
1	2400MHz	1.4485
2	2400MHz	1.2189
3	2400MHz	1.4330

Return Loss

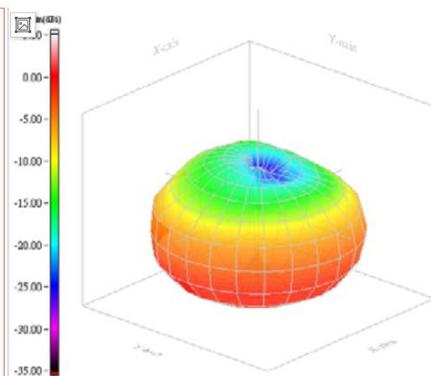


3D Gain Pattern

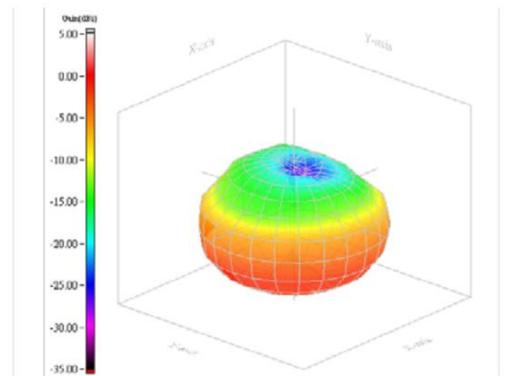
The Gain pattern was measuring in Vic’s FAR-field chamber. DUT will be placed on the table of rotator, a standard horn antenna and Vector Network Analyzer was using to collected data. (Please contact to Vic for more detail)



(2400 MHz)



(2450 MHz)



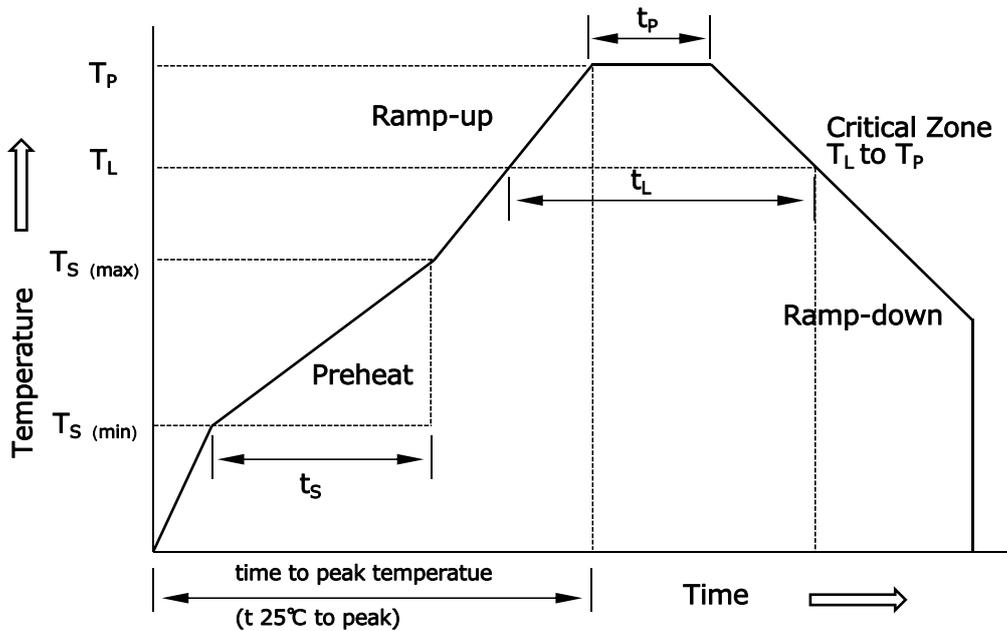
(2500 MHz)



TYY-ZT5020-DJ-1 ----- Chip Antenna

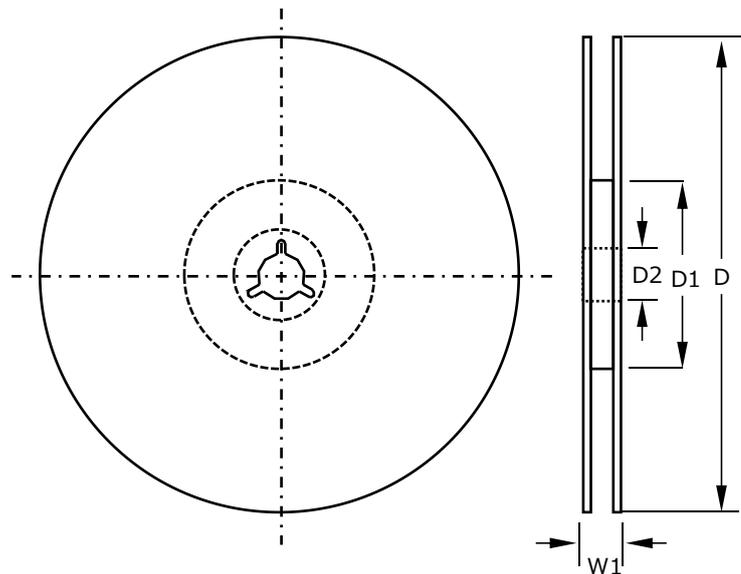
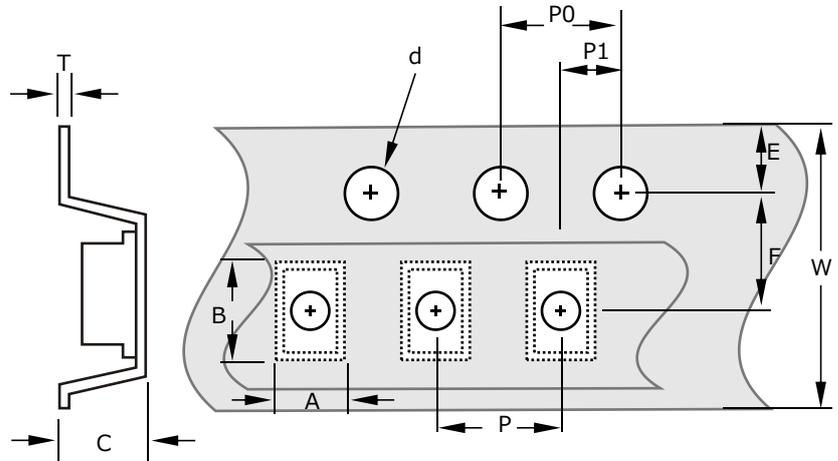
Recommendable reflow soldering

Profile Feature	Pb-Free Assembly
Average Ramp-UP Rate (T _{smax} to T _p)	3 °C/secondmax.
Preheat	
-Temperature Min(T _{smin})	150 °C
-Temperature Max(T _{smax})	200 °C
-Time(T _{smin} to T _{smax})	60-180seconds
Time maintained above:	
-Temperature(T _L)	217 °C
-Time(t _L)	60-150 seconds
Peak/Classification Temperature(T _p)	260°C
Time within 5°C of actual Peak Temperature(t _p)	20-40 seconds
Ramp-Down Rate	6°C/secondmax.
Time 25°C to Peak Temperature	8 minutes max.



Packaging Information

Symbol	MM (INCHES)
A	2.30 ± 0.2 (0.091 ± 0.008)
B	5.30 ± 0.2 (0.209 ± 0.008)
C	1.35 ± 0.2 (0.053 ± 0.008)
d	1.55 ± 0.05 (0.061 ± 0.002)
D	180.00 ± 2.00 (7.087 ± 0.079)
D1	60.0 ± 1.00 (2.362 ± 0.039)
D2	13.0 ± 0.20 (0.516 ± 0.008)
E	1.75 ± 0.10 (0.069 ± 0.004)
F	3.50 ± 0.05 (0.138 ± 0.002)
P	4.00 ± 0.10 (0.157 ± 0.004)
P0	4.00 ± 0.10 (0.157 ± 0.004)
P1	2.00 ± 0.05 (0.079 ± 0.002)
T	0.20 ± 0.05 (0.008 ± 0.002)
W	8.00 ± 0.10 (0.315 ± 0.004)
W1	11.6 ± 1.00 (0.457 ± 0.039)



Quantity of products in the taping package

- (1) Standard quantity : 3,000 pcs/Reel for the Series.
- (2) Shipping quantity is a multiple of standard quantity.
- (3) For additional information, please contact your local Sales Representative.