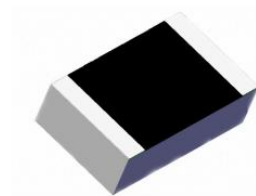




Features

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



VCA3216K24MN ----- Chip Antenna

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

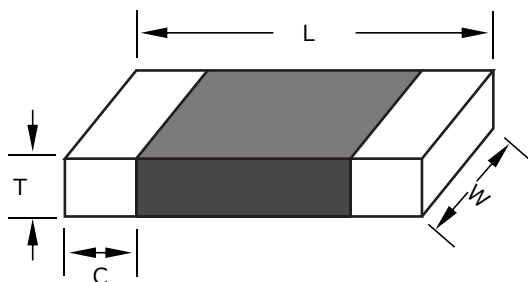
Parameter	Specification	Units
Frequency	2450	MHz
Bandwidth	100 (Min.)	MHz
*Peak Gain	2.78	dBi
*Peak Efficiency	72.60%	%
Impedance	50	Ω
Maximum Power	4	W
VSWR	≤ 2	
Polarization	Linear	

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

Absolute Maximum Ratings

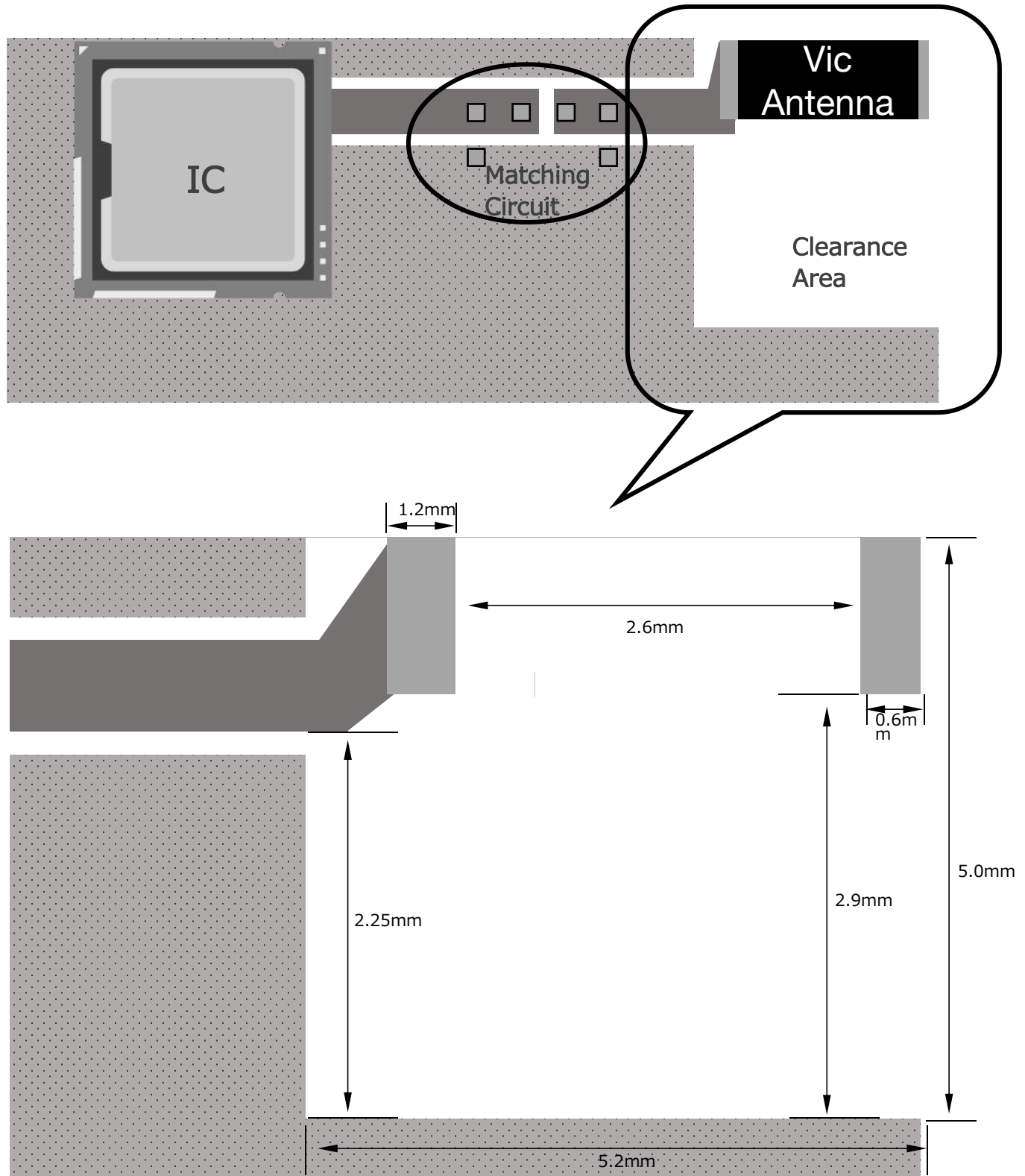
Parameter	Symbol	Value	Unit
Maximum Operating temperature	T _{OPER}	-40 to +90	°C
Maximum Storage temperature	T _{STG}	-55 to +125	°C
Maximum lead temperature for soldering during 10s	T _L	260	°C

Product Dimension

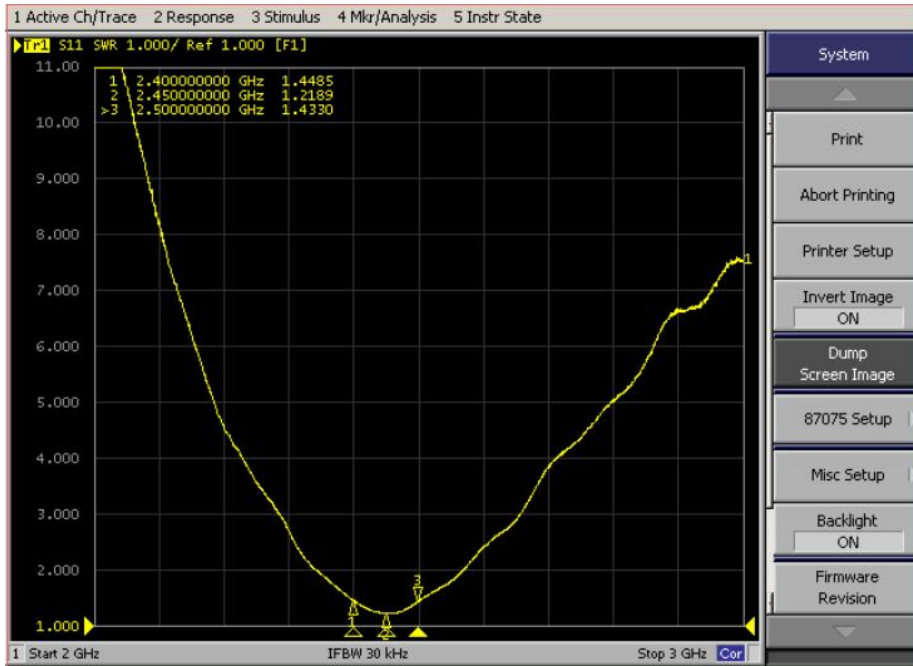


Dimension	MM (INCHES)
L	3.2 ± 0.2 (0.126 ± 0.008)
W	1.6 ± 0.2 (0.063 ± 0.008)
T	0.9 ± 0.2 (0.035 ± 0.008)
C	0.5 ± 0.3 (0.02 ± 0.012)

Recommended PCB layout

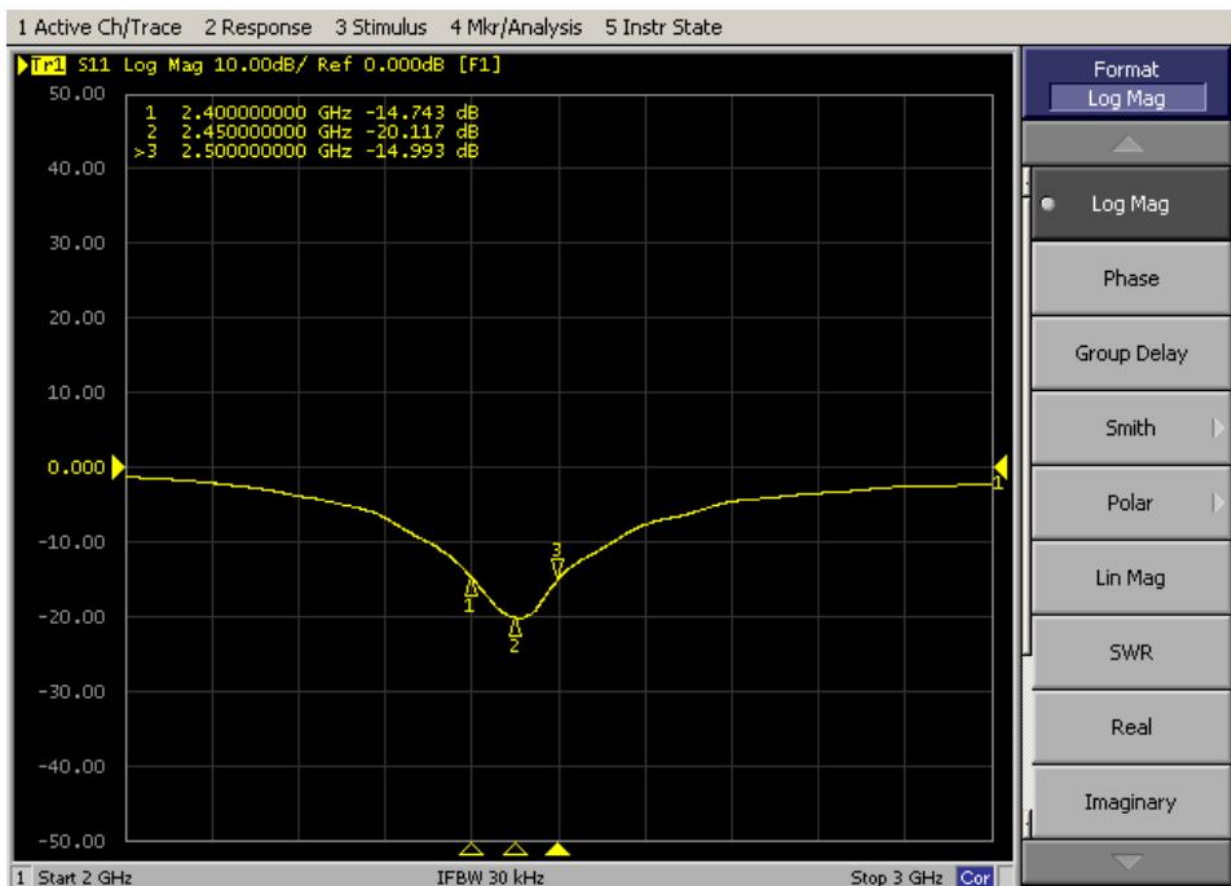


Typical Characteristics



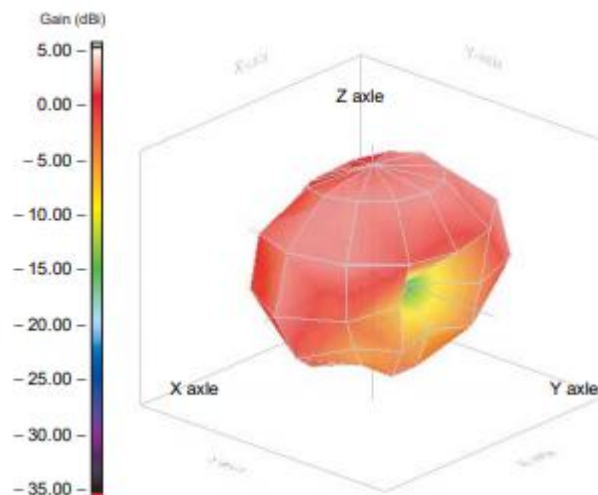
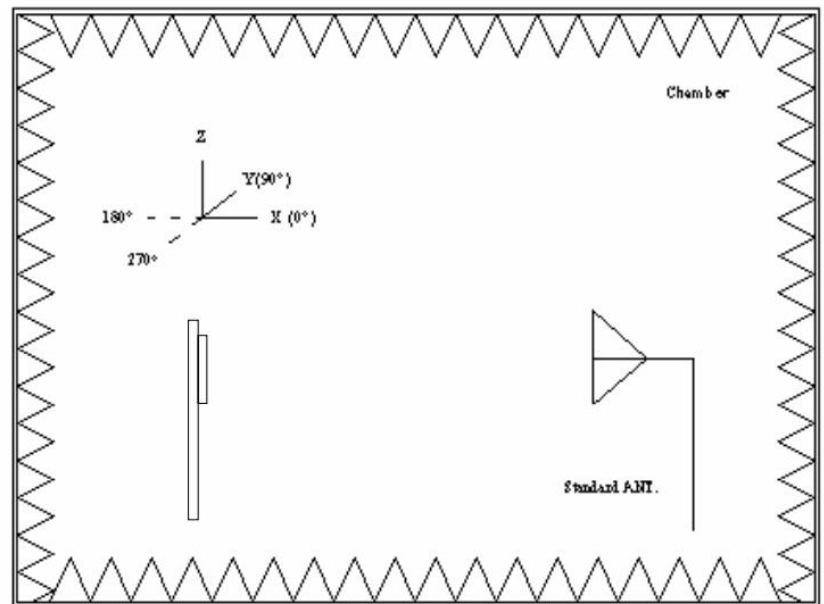
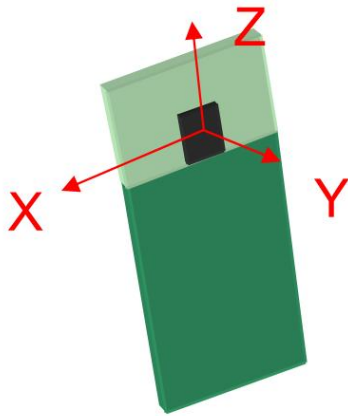
Mark	Frequency	VSWR
1	2400MHz	1.4485
2	2450MHz	1.2189
3	2500MHz	1.4330

Return Loss



3D Gain Pattern (2400 MHz)

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)

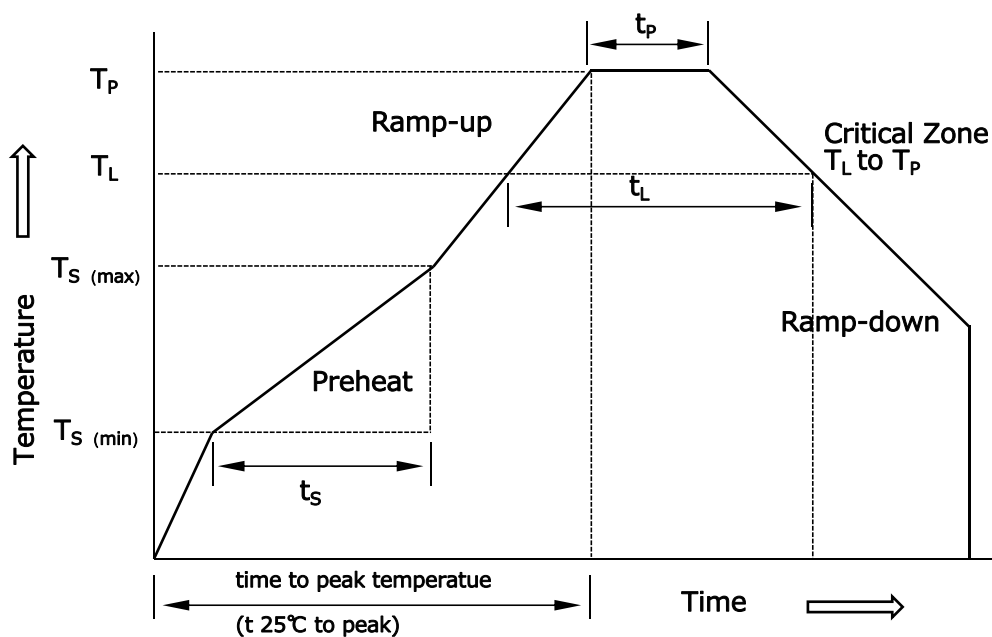




VCA3216K24MN ----- Chip Antenna

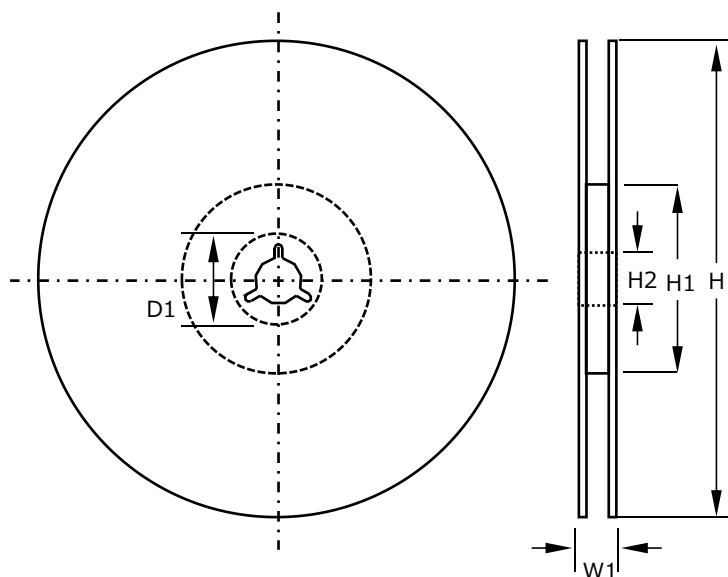
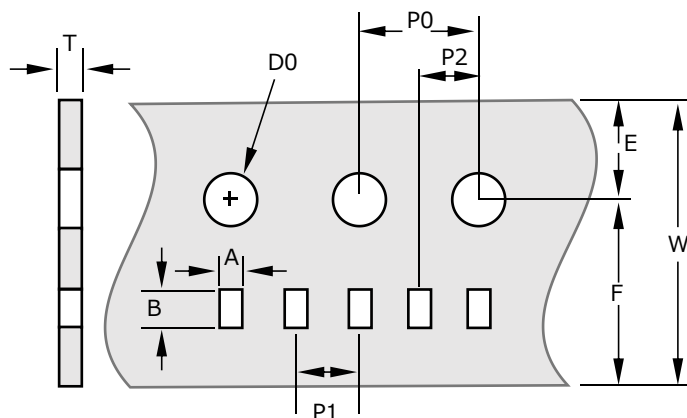
Recommendable reflow soldering

Profile Feature	Pb-Free Assembly
Average Ramp-UP Rate (T _{smax} to T _p)	3 °C/secondmax.
Preheat -Temperature Min(T _{smin}) -Temperature Max(T _{smax}) -Time(T _{smin} to T _{smax})	150 °C 200 °C 60-180seconds
Time maintained above: -Temperature(T _L) -Time(t _L)	217 °C 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	1206(3216)
A	1.88 ± 0.03 (0.074 ± 0.001)
B	3.50 ± 0.03 (0.138 ± 0.001)
E	1.75 ± 0.10 (0.069 ± 0.004)
F	3.5 ± 0.05 (0.138 ± 0.002)
P0	4.00 ± 0.10 (0.157 ± 0.004)
P1	4.00 ± 0.10 (0.157 ± 0.004)
P2	2.00 ± 0.05 (0.079 ± 0.002)
D0	1.50 ± 0.10 (0.059 ± 0.004)
W	8.00 ± 0.30 (0.315 ± 0.012)
T	1.5 ± 0.03 (0.059 ± 0.001)
D1	21.00 ± 0.80 (0.827 ± 0.032)
H	180.00 ± 2.00 (7.087 ± 0.079)
H1	62.0 ± 1.5 (2.44 ± 0.059)
H2	13.00 ± 1.00 (0.512 ± 0.039)
W1	13.0 ± 1.00 (0.512 ± 0.039)



DIMENSIONS: $\frac{\text{MM}}{(\text{INCHES})}$

Quantity of products in the taping package

- (1) Standard quantity : 5,000 pcs/Reel for the Series.
- (2) Shipping quantity is a multiple of standard quantity.
- (3) For additional information, please contact your local Sales Representative.

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