

ANTENNA PRODUCTS

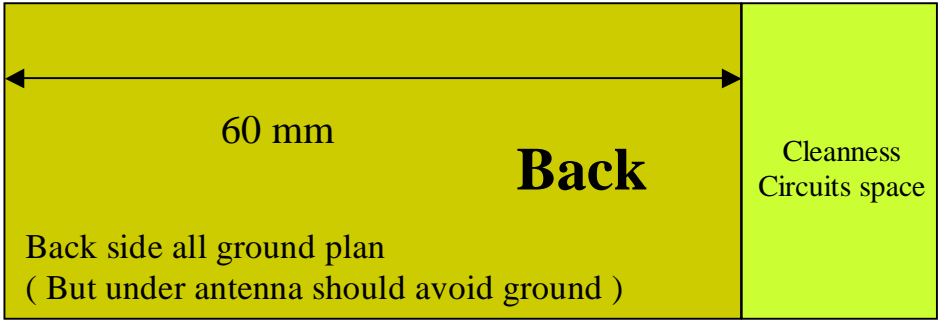
DATA SHEET

433MHz Ceramic Chip Antenna

Sep, 2005, V3

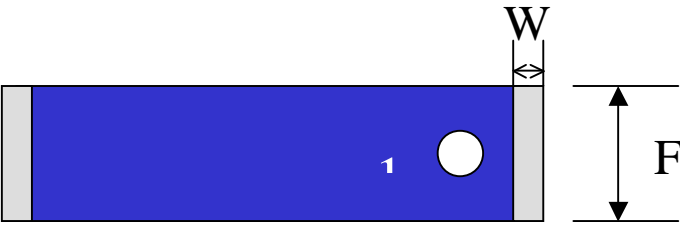
	Print date 05/09/07						
	Multilayer Ceramic Antenna for 433 MHz (small size)	CAN4313 129 200431B	15 th , Aug, 05				
			30 th , Aug,05				
			7 th , Sep,05				
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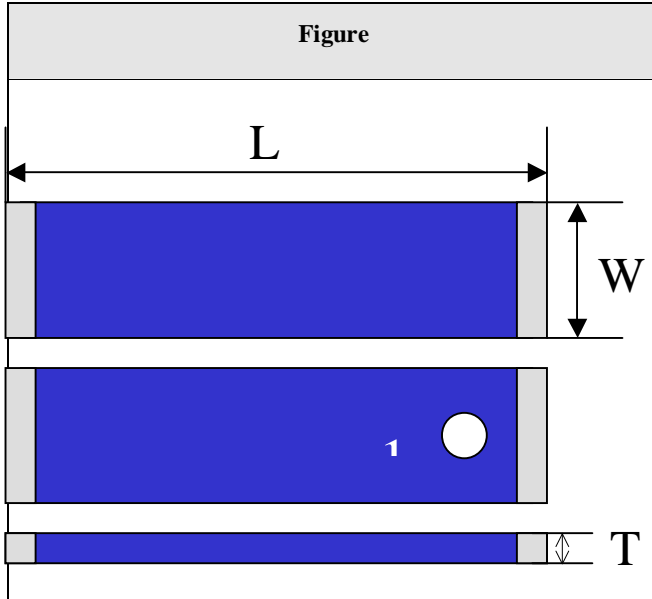
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2. SOLDER LAND PATTERN FOR ANTENNA

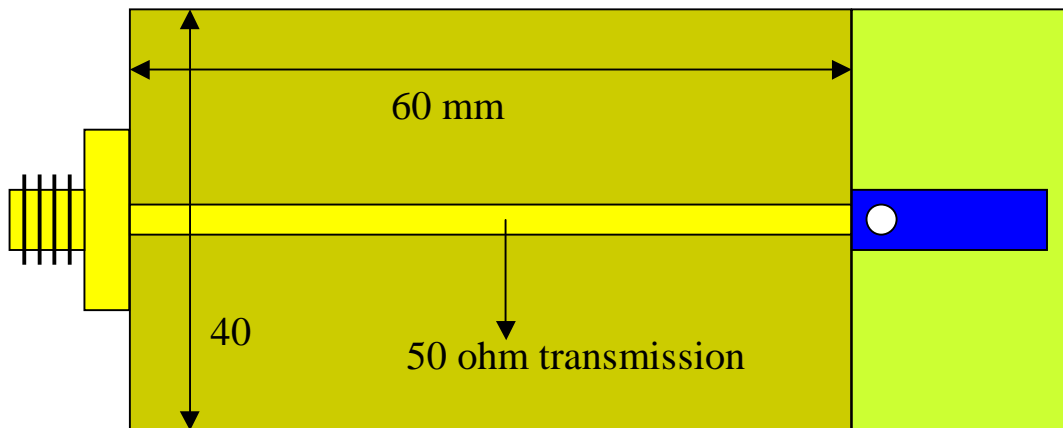
Figure	Dimensions		Remark
	w	$0.85 \pm 0.3 \text{ mm}$	Feed Pad
	F	$4.20 \pm 0.3 \text{ mm}$	Feed Pad

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3. MECHANICAL DATA

Figure	Dimension	Port
	W $4\pm0.5\text{mm}$	Feed termination
	L $12\pm0.5\text{mm}$	Solder termination
	T $1.5\pm0.3\text{mm}$	

4. TEST BOARD DIMENSION FOR S11 (RETURN LOSS) AND RADIATION PATTERN MEASUREMENT

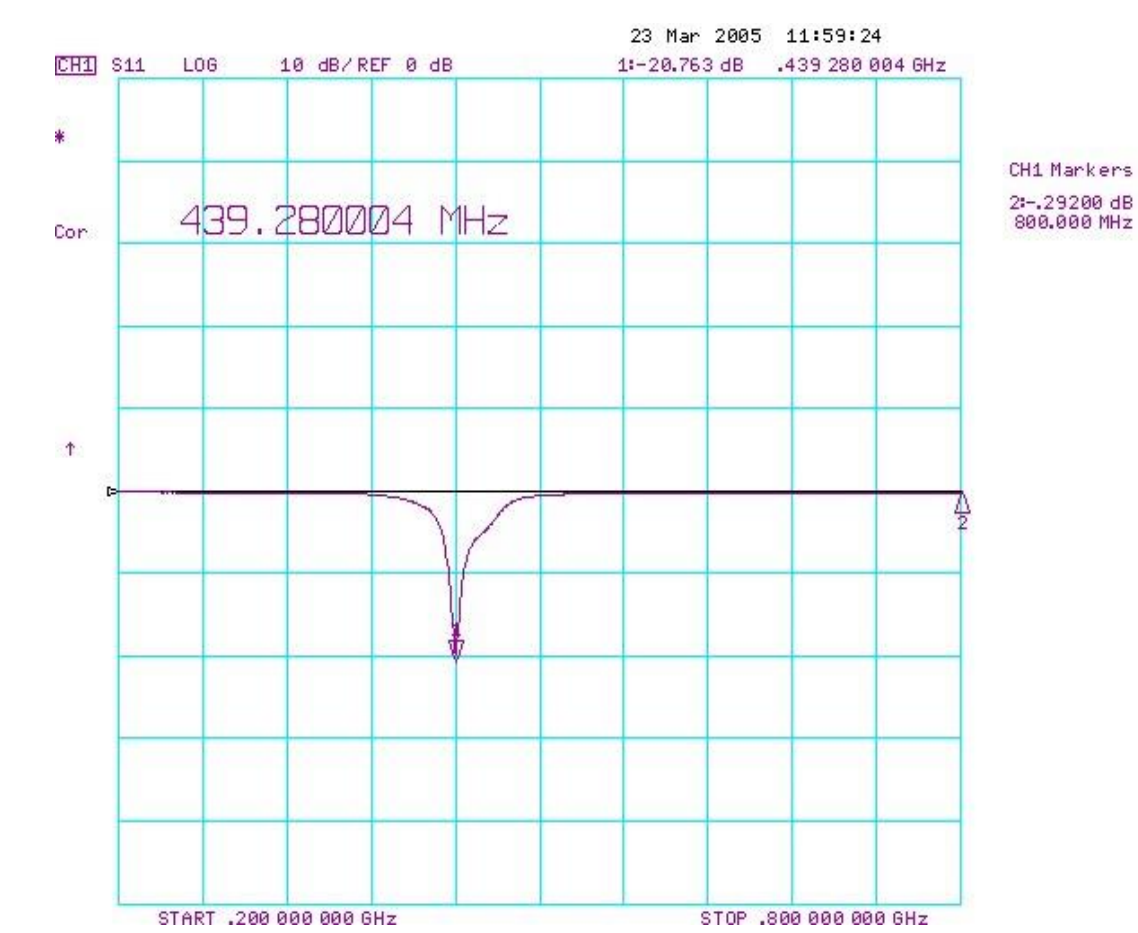


FR-4 PCB thickness = 0.8 mm

The length of transmission line = 60 mm (depends on PCB thickness)

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5. S11 RETURN LOSS



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RELIABILITY DATA (Reference to IEC Specification)

IEC 384-10/ CECC 32 100 CLAUSE	IEC 6006868-2 TEST METHOD	TEST	PROCEDURE	REQUIREMENTS
4.4		Mounting	The antenna can be mounted on printed-circuit boards or ceramic substrates by applying wave soldering, reflow soldering (including vapour phase soldering) or conductive adhesive	No visible damage
4.5		Visual inspection and dimension check	Any applicable method using $\times 10$ magnification	In accordance with specification (no chip off 3 mm)
4.6.1		Antenna	Central Frequency at 20 °C	Standard test board in page 4
4.8		Adhesion	A force of 5 N applied for 10 s to the line joining the terminations and in a plane parallel to the substrate	No visible damage
4.9		Bond strength of plating on end face	Mounted in accordance with CECC 32 100, paragraph 4.4	No visible damage
			Conditions: bending 0.25 mm at a rate of 1mm/s, radius jig. 340 mm, 1 mm warp on FR4 board of 90 mm length	No visible damage

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IEC 384-10/ CECC 32 100 CLAUSE	IEC 6006868-2 TEST METHOD	TEST	PROCEDURE	REQUIREMENTS
4.10	Tb	Resistance to soldering heat	260 ± 5 °C for 10 ± 0.5 s in a static solder bath	The terminations shall be well tinned after recovery and Central Freq. Change $\pm 6\%$
		Resistance to leaching	260 ± 5 °C for 30 ± 1 s in a static solder bath	Using visual enlargement of $\times 10$, dissolution of the termination shall not exceed 10%
4.11	Ta	Solderability	Zero hour test, and test after storage (20 to 24 months) in original atmosphere; un-mounted chips completely immersed for 2 ± 0.5 s in 235 ± 5 °C.	The termination must be well tinned, at least 75% is well tinned at termination

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Revision Control:

Revision	Date	Content	Remark
1	15 th , Aug. 2005	New Issued	
2	30 th , Aug. 2005	Modification of end-termination's appearance	
3	7 th , Sep. 2005	Modification of 12nc and packing type	

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