



## Pulse Embedded (SMT) Antennas for ISM (315MHz, 433MHz, 915MHz and 868MHz) applications

Rev F (Aug 2016)

App.	Type	Pulse Part number	RF Performance						ME requirement			Note	Availability
			Frequency range (MHz)	RL Min. (dB)	Peak Gain (dBi)		Efficiency (%)		Antenna DIM. (LxWxH,mm)	GC-area (L x W,mm)	Evaluation Board Size (L x W,mm)		
					Peak	Band edges	Peak	Band edges					
868MHz (868MHz-870MHz)	Ceramic chip	<a href="#">W3000</a>	868-870	-15	-1.4	-1.5	30	29	7 x 1.6 x 1.6	20 x 9.50	40 x 20	Vertical, tuned by stripline on PCB	Stock
		<a href="#">W3013</a>	868-870	-11	1.5	1.4	65	64	10 x 3.2 x 4.0	10.80 x 8.25	80 x 37	Center edge	Stock
		<a href="#">W3016</a>	868-870	-19	-2.2	-2.5	25	23	10 x 3.2 x 4.0	11.50 x 7	25 x 25	Corner, Small GC-area and PCB	Stock
	Helical	<a href="#">W3117</a>	869-894	-9	0	-1.3	56	40	12.4 x 8 x 2.5	8 x 40	100 x 40	Horizontal, Center top	Leadtime
		<a href="#">W3118A</a>	869-894	-9	0	-1.4	52	38	2.5 x 8 x 8	6 x 11	100 x 40	Vertical, Corner	Leadtime
915MHz (902MHz-928MHz)	Ceramic chip	<a href="#">W3012</a>	902-928	-6	2	0.5	70	50	10 x 3.2 x 4	10.80 x 8.25	100 x 37	Center edge	Stock
		<a href="#">W3014</a>	880-960	-7	-0.5	-1	45	40	10 x 3.2 x 1.5	40 x 16	96 x 40	Center Top	Stock
	Helical	<a href="#">W3112A</a>	902-928	-10	0.9	-0.3	67	50	2.5 x 8 x 8	6 x 11	100 x 40	Vertical, Corner	Stock
		<a href="#">W3113</a>	902-928	-10	0.8	-0.3	66	51	12.4 x 8 x 2.5	8 x 40	100 x 40	Horizontal, Center top	Stock
Combo 868/915MHz and 2.4GHz	Direct PCB	<a href="#">W3331</a>	863-928	-6	1.7	0.9	64	53	45 x 10 x 0.8	45 x 4.5	119 x 102	Corner, Small GC-area and PCB, Dual feeds	Contact to sales for datasheet
			2400-2500	-12	4	1.5	85	69					
	Direct PCB	<a href="#">W3333</a>	863-928	-8	2.4	1.8	75	-	40 x 15 x 0.8	40 x 4.5	119 x 102	Corner, Small GC-area and PCB, Dual feeds	Contact to sales for datasheet
			2400-2500	-12	4.5	3.0	85	66					
433MHz	Ceramic chip	<a href="#">W3015</a>	433 +/- 1	-10	1.6	-	78	-	10 x 3.2 x 4.0	10.60 x 14	200 x 37	Center edge	Leadtime
	Helical	<a href="#">W3127</a>	433-435	-15	-2.9	-	-	-	35.35 x 9.90	8 x 40	100 x 40	Center Top	Stock
315 MHz	Helical	<a href="#">W3126</a>	315	-10	-5	-	-	-	35.35 x 9.90	8 x 40	100 x 40	Center Top	Stock

**Note:** 1. ISM application for 902MHz-928MHz band (center frequency 915MHz). 2. Applications from ECA chart for 862MHz-890MHz. (a) Alarms: 868.6-869.7MHz, (b) RFID: 865-868MHz, (c) Tracking, tracing, and data acquisition: 870-875.6MHz, and (d) Wireless audio/ multimedia: 863-865MHz. 3. "Stock" Stocked parts are typically available from Pulse distribution partners immediately.