



Pulse Embedded (SMT) Antennas for WiFi/BT/Zigbee applications

ev F (AUG 2016)

App.	Type	Pulse Part Number	RF Performance						ME requirement			Note	Availability
			Operating Frequency (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					
Single WiFi, BT, Zigbee	Ceramic chip	W3000	2400-2483.5	-18	2.5	2.1	65	55	7 x 1.6 x 1.6	6.00 x 11.00	40 x 11	3 Matching components Horiz. mount	Stock
		W3001		-12	2.2	1.5	53	45		6.00 x 20.00	30 x 20		
		W3008		-6	1.5	0.5	75	60	10 x 3.2 x 4.0	10.80 x 6.25	80 x 37	On Ground solution	Stock
		W3008C		-8	1.7	0.7	70	55	3.2 x 1.6 x 1.1	4.00 x 4.25	80 x 37		Stock
		W3043		-11	2.2	1.9	75	70	3.2 x 1.6 x 1.1	4.00 x 6.25	80 x 37		Stock
		W3092		-12	4		70		3.2 x 1.6 x 1.1	12 x 20	37 x 20	Small PCB size	Leadtime
	Helical	W3108		-6	2	0	60	43	2 x 1.2 x 0.55	8 x 2.5	110 x 55	small antenna size	Contact to sales for datasheet
Dual WiFi	Ceramic chip	W3006	2400-2483.5	-8	3.2	2.7	70	65	10 x 3.2 x 1.5	11.60 x 6.00	80 x 37		Stock
			5150-5850	-10	4.2	3.0	80	70					
		W3078	2400-2483.5	-10	1.7	1.0	65	55	3.2 x 1.6 x 1.1	11.15 x 6.40	80 x 37	@ Corner	Stock
			4950-5850	-6	4.3	3.7	80	55					
		W3079	2400-2483.5	-13	2.5	1.3	72	60	3.2 x 1.6 x 1.1	11 x 6	80 x 37	Center	Stock
	4950-5850	-8	5.7	3.3	78	55							
Combo GPS+WiFi or ISM 868/915 + WiFi	Ceramic chip	W3056	2400-2483.5	-8	3.2	2.5	80	70	10 x 3.2 x 1.5	10.80 x 6.25 (Notch)	100 x 40	Single feed and 2.4GHz WiFi	Stock
			1575.42±10	-10	2.5	1.5	75	65					
		W3064C	2400-2483.5	-11	-0.7	-1.7	80	70	10 x 3.2 x 1.5	10.80 x 6.40 (Divided)	96 x 45	Dual feed and 2.4GHz WiFi	Contact to sales for datasheet
			1575.42 ±10	-15	-1	-2.0	70	60					
		W3095	2400-2483.5	-11	2.5	1.5	85	80	10 x 3.2 x 1.5	17.80 x 6.45	70 x 35	Dual feed and Dual WiFi + GPS/Glonass/Beidou	Stock
			4950-5850	-6	3.5	1.0	70	50					
			1559-1610.5	-10	1.5	0.8	75	60					
W3320	863-928	-8	1.5	0.8	67	55	10 x 3.2 x 2	12 x 9.5	120 x 50	Center, Dual feed	Leadtime		
	2400-2500	-6	3.4	1.4	61	45		4.6 x 3.95					

* NOTE: 1. Recommended minimum GND dimensions of PIFA type and Monopole's are roughly 40x20mm and 30x20mm (or 40x11mm), respectively. Need to construct matching values to optimize antenna performance on surrounding mechanics and materials. 2. Pulse offers very unique GPS+WiFi combo antennas on single ceramic chip (10x3.2x1.5mm). There are three different types of combo antennas. W3056 (2.4G Wifi +GPS, single feed), W3064C (2.4G Wifi+GPS, dual feed), and W3095 (2.4G and 5G Wifi +GPS/Glonass/Beidou, dual feed). 3. "Stock" Stocked parts are typically available from Pulse distribution partners immediately.