

Embedded and Internal UWB RF Solutions

Pulse Electronics offers a comprehensive range of Ultra-Wideband (UWB) internal antenna and filter solutions designed to support high-precision wireless connectivity across the 3.1–9.2 GHz bands. With compact form factors and versatile mounting options, these solutions deliver exceptional performance, efficiency, and reliability. Built to meet the needs of next-generation UWB applications, Pulse's antennas and filters ensure seamless integration and consistent connectivity in diverse environments, making them ideal for applications requiring precise and efficient UWB communication.



SMD Bandpass Filters

Part Number	Size	Channel Group	Pass Band (Typ.)	Group Delay Ripple*	Return Loss (Typ.)	Insertion Loss (Typ.)	Attenuation	Attenuation	Certifications
BPF2012LKBMR6580A	2012	5 & 9	6240 - 8240 MHz	0.44 ns (Typ.) 1 ns (Max.)	12.2dB	1.86dB	5860MHz 16.9dB	9000MHz 27.8dB	AEC-Q200 RoHS
BPF2012LKAMR6580A	2012	5 & 9	6240 - 8240 MHz	0.35 ns (Typ.) 1 ns (Max.)	14.1	1.55dB	5860MHz 18.5dB	9000MHz 24.0dB	AEC-Q200 RoHS
BPF1608LKAPR6580A	1608	5 & 9	6240 - 8240 MHz	0.57 ns (Typ.) 1.5 ns (Max.)	22.2dB	1.4dB	5925MHz 6.2dB	12500MHz 32.3dB	RoHS

SMD Ceramic Chip Antennas

Part Number	Size	Channel Group	Frequency	RL (Min.)	Gain (Min.)	Efficiency (Typ.)	Copper Keep Out	Mounting Location
ANT1110LL40R2590A	1110	1 thru 8	2870 – 8500MHz	6.0db	3.32dBi	62.3%	12 x 30mm	End
ANT8060LL31R4000A	8060	1 thru 4	3100 - 4800MHz	6.5db	3.34dBi	69.3%	17 x 12mm	Corner
W3340	3216	5 & 9	6000 - 8500	9dB	1.5dBi	65%	7 x 4.6mm	Corner
ANT3216LL02R6580A	3216	5 & 9	6240 - 8240MHz	10dB	4.1dBi	77%	12 x 6.5mm	Corner
ANT1608LL00R6580A	1608	5 & 9	6240 - 8240MHz	10dB	2.0dBi	82.9%	10 x 7mm	Corner
W3155	3216	5 thru 12	6240 - 9235MHz	10dB	3.0dbi	55%	8.2 x 5.2mm	Corner

SMD Composite FR4 Antennas

Part Number	Size	Channel Group	Frequency	RL (Min.)	Gain (Min.)	Efficiency (Typ.)	Copper Keep Out	Mounting Location
ANT3216LL00R6580A	3216	5 & 9	6240 - 8240MHz	10dB	2.0dBi	63.8%	12 x 6.5mm	Corner
ANT1608LL00R6580A	1608	5 & 9	6240 - 8240MHz	10dB	2.0dBi	82.9%	10 x 7mm	Corner

Internal Flex PC Antennas

Part Number	Size	Channel Group	Frequency	RL (Min.)	Gain (Min.)	Efficiency (Typ.)	Cable Length*	Connector*
W3396A	16.5 x 5.5	5 thru 12	6240 - 9 235MHz	8.5dB	4dBi	52%	100mm	I-PEX
W3396B	35 x 16	5 thru 12	6240 - 9 235MHz	10dB	4dBi	53%	100mm	I-PEX