

PRODUCTS LINEUP – PART 1

Crystal Resonator, Oscillator, Radio frequency (RF) filters are key components in any wireless system and as these systems continue to be miniaturized, the pressure on filter technology to shrink as well without compromising performance continues.

Handheld systems and their associated volumes have generated strong interest in filter technologies that show promise for lower cost and smaller size.

Today's wireless devices must not only reject signals from other services but from themselves, too, as the number of bands packed inside each device increases.

A high-end smartphone must filter the transmit and receive paths for 2G, 3G, and 4G wireless access methods in up to 15 bands, as well as Wi-Fi, Bluetooth and the receive path of GPS receivers. Signals in the receive paths must be isolated from one another. They also must reject other extraneous signals whose causes are too diverse to list.

To do so, a multi-band smartphone will require eight or nine filters and eight duplexers. Without acoustic filter, Crystal and Oscillator technology, it would be impossible.

Dedicated for different application we introduce in the news paper "PRODUCTS LINEUP – PART 1 PRODUCTS" suitable components for GNSS (GPS) Applications



	P/N	FREQUENCY	INSERTION LOSS	BAND WIDTH	SIZE	NOTE
GPS SAW						
	TA1804A	1.582.469 MHz	1.1 dB	46.834 MHz	1.1 x 0.9 mm	
	TA1954A (GPS+GLONASS+COMPASS)	1582.47 MHz	1.2 dB	46.84 MHz	1.1 x 0.9 mm	
	TA1425A (GPS band)	1574.42 MHz	0.8 dB	2 MHz	1.4 x 1.1 mm	
	TA0757B (GPS band)	1575.42 MHz	0.9 dB	2 MHz	1.4 x 1.1 mm	
	TA1343A (GPS+GLONASS+GALILEO+BEIDOU)	1583 MHz	1.2 dB	46.79 MHz	1.4 x 1.1 mm	
	TA1343B (GPS+GLONASS+GALILEO+BEIDOU)	1583 MHz	1.2 dB	46.79 MHz	1.4 x 1.1 mm	AEC-Q200
	TA1661A (GPS+GLONASS+GALILEO+BEIDOU)	1583 MHz	1.8 dB	46.79 MHz	1.4 x 1.1 mm	AEC-Q200
	TA1267A (GPS+GLONASS)	1.588.655 MHz	1.25 dB	34.47 MHz	1.4 x 1.1 mm	
	TA1267E (GPS+GLONASS)	1.588.655 MHz	1.25 dB	34.47 MHz	1.4 x 1.1 mm	AEC-Q200
	TA1901A	1587.5 MHz	2 dB	57 MHz	2.0 x 1.6 mm	AEC-Q200
	TA1745A	1583 MHz	1.8 dB	46.79 MHz	2.0 x 1.6 mm	AEC-Q200
	TA1658A (GNSS)	1582.4 MHz	1.7 dB	46.61 MHz	3.0 x 3.0 mm	AEC-Q200
	TA1925A (GPS+GLONASS L2)	1234.4 MHz	3.3 dB	45 MHz	3.0 x 3.0 mm	AEC-Q200
	TA0440A (Car Antenna)	1575.42 MHz	2.9 dB	2 MHz	3.0 x 3.0 mm	AEC-Q200
	TA1785A	1583 MHz	1.8 dB	46.79 MHz	3.0 x 3.0 mm	AEC-Q200
	TA0676A	1592.5 MHz	2.6 dB	43 MHz	3.0 x 3.0 mm	AEC-Q200
	TA1442A (BEIDOU)	2492 MHz	1.55 dB	5 MHz	3.0 x 3.0 mm	AEC-Q200
	TA1924A (GPS L5+GLONASS E5)	1191.8 MHz	3.5 dB	55 MHz	3.8 x 3.8 mm	AEC-Q200

PRODUCTS LINEUP – PART 1

P/N	FREQUENCY	INSERTION LOSS	BAND WIDTH	SIZE	NOTE
GPS FRONT END MODULE					
TN0081A (GPS+GLONASS)	1575~1606 MHz	1.65 dB	18.5 MHz	2.5 x 2.5H : 0.535 mm	AEC-Q100
TN0089A (GPS+GLONASS+GALILEO+BEIDOU)	1575 MHz 1597-1606 MHz 1559-1591 MHz	1.5 dB	15.5 MHz	1.5 x 1.1H : 0.39 mm	AEC-Q100

P/N	FREQUENCY	LOAD CAPACITANCE	TOLERANCE	SIZE	NOTE
GPS Xtal					
TZ3120A	32.768 KHz	9 pF	±20 ppm	1.6 x 1.0 mm	
TZ3108A	32.768 KHz	12.5 pF	±20 ppm	1.6 x 1.0 mm	
TZ2528A	32.768 KHz	12.5 pF	±20 ppm	2.0 x 1.2 mm	
TZ1510C	32.768 KHz	9 pF	±20 ppm	3.2 x 1.5 mm	AEC-Q200
TZ1006A	32.768 KHz	12.5 pF	±20 ppm	3.2 x 1.5 mm	
TZ2754C	32.768 KHz	12.5 pF	±20 ppm	3.2 x 1.5 mm	AEC-Q200
TZ1628A	26 MHz	19 pF	±7 ppm	3.2 x 2.5 mm	
TZ1628C	26 MHz	19 pF	±7 ppm	3.2 x 2.5 mm	AEC-Q200

P/N	FREQUENCY	VOLTAGE	TOLERANCE	SIZE	NOTE
GPS TCXO/XO					
TX0628C	19.2 MHz	3.3V	±0.5 ~ ±7.5 ppm	2.0 x 1.6 mm	wide temp range to +105 °C
TX0408C	26 MHz	2.85V	±0.5 ppm	2.0 x 1.6 mm	
TX0544B	38.4 MHz	1.8V	±0.5 ppm	2.0 x 1.6 mm	
TX0678B	48 MHz	1.8 ~ 3.3V	±0.5 ~ ±7.5 ppm	2.0 x 1.6 mm	wide temp range to +105 °C
TX0360A	16.367667 MHz	2.85V	±0.5 ppm	2.5 x 2.0 mm	
TX0358A	16.368 MHz	1.8V	±0.5 ppm	2.5 x 2.0 mm	
TX0590B	16.369 MHz	1.7 ~ 3.3V	±2 ppm	2.5 x 2.0 mm	
TX0578C	26 MHz	1.8V	±0.5 ppm	2.5 x 2.0 mm	
TX0395B	26 MHz	2.8V	±0.5 ppm	2.5 x 2.0 mm	
TX0486A	26 MHz	2.8V	±0.5 ppm	2.5 x 2.0 mm	
TX0617B	26 MHz	2.8V	±0.5 ppm	2.5 x 2.0 mm	
TX0275A	16.368 MHz	2.85V	±0.5 ppm	3.2 x 2.5 mm	
TX0203A	26 MHz	2.775V	±0.5 ppm	3.2 x 2.5 mm	