

Wireless Components

www.yageo.com

About Yageo

Founded in 1977, the Yageo Corporation has become a world-class provider of passive component services with capabilities on a global scale, including production and sales facilities in Asia, Europe and the Americas.

The corporation is uniquely positioned to provide one-stop shopping, offering its complete product portfolio of resistors, capacitors and high performance wireless component products in both commodity and specialty versions to meet the diverse requirements of customers.

Yageo currently ranks as the world No.1 in chip-resistors, No. 3 in MLCCs and No. 4 in ferrite products, with strong global presence - HQ in Taipei, Taiwan, 22 sales/service offices in 18 countries, 8 manufacturing sites, 5 JIT logistic outfits and countries, 2 R&D centers worldwide. Ferroxcube and Vitrohm are part of Yageo group, who produce ferrites and leaded resistors.

Why choose Yageo? Yageo's competitive advantages are : comprehensive product range, global sales, marketing and supply chain management, strong and diversified customer base, leading brand in greater China, state-of-the-art production technology, superior quality, strong R&D & FAE capabilities, and global cost leadership.

Our Wireless Components BU provides mobile computing and machine-to-machine (M2M) solutions with versatile wireless technologies.



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Introduction

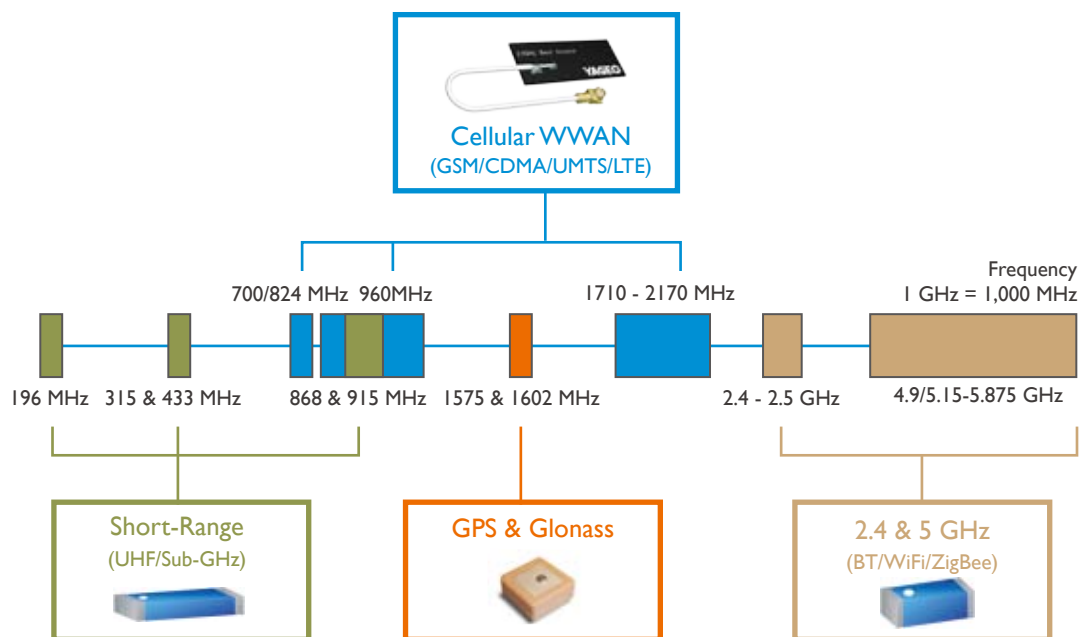
Yageo produces a comprehensive range of wireless components, including metal/PCB/FPCB antenna, patch antenna (ceramic bulk), active antenna (LNA circuit), chip antenna, and RF components (filter/balancer). We also provide customization service to meet specific requirements.

Our products cover a wide variety of wireless communication protocols, including Bluetooth & IEEE 802.11b/g, WPAN (Wireless Personal Area Network), WLAN (Wireless Local Area Network), WMAN (Wireless Metropolitan Area Network), WWAN (Wireless Wide Area Network) and LTE (Long Term Evolution).

Antenna				
				
Metal	PCB	FPCB	LTCC/Ceramic	Patch/Ceramic

LTCC Balun/Filter/Balun+Filter (Combo)/X2Y				
				
Balun	Filter	Balun + Filter	X2Y Filter	FEM Substrate

Yageo Antenna Portfolio



Portable devices, home appliances, industrial/medical equipment will be equipped with wireless connectivity for Peer-to-Peer data exchange. More wireless components are needed.



Key features of wireless components:

Compact

- Maximize performance with the smallest size required
- The smallest 2.4/5 GHz antenna: PCB 18.4x7.5 mm / LTCC 2x1.25 mm

Multi-Band & High Efficiency

- WWAN: Quad-band (850/900/1800/1900 MHz) to Penta-band (850/900/1800/1900/2100 MHz)
- Support 4G cellular network LTE 700 MHz (Band 12, 13, 17), 2300/2600 MHz
- Multi-band 2.3/2.4/2.7 & 5 GHz supporting WLAN/WiMAX/LTE
- Operating in dual navigational systems GPS & Glonass: 1575 – 1602 MHz

High Reliability

- Operating temperature range: -40°C ~ 105°C
- Operating humidity 95% RH at 40°C
- Vibration verification

Easy Installation

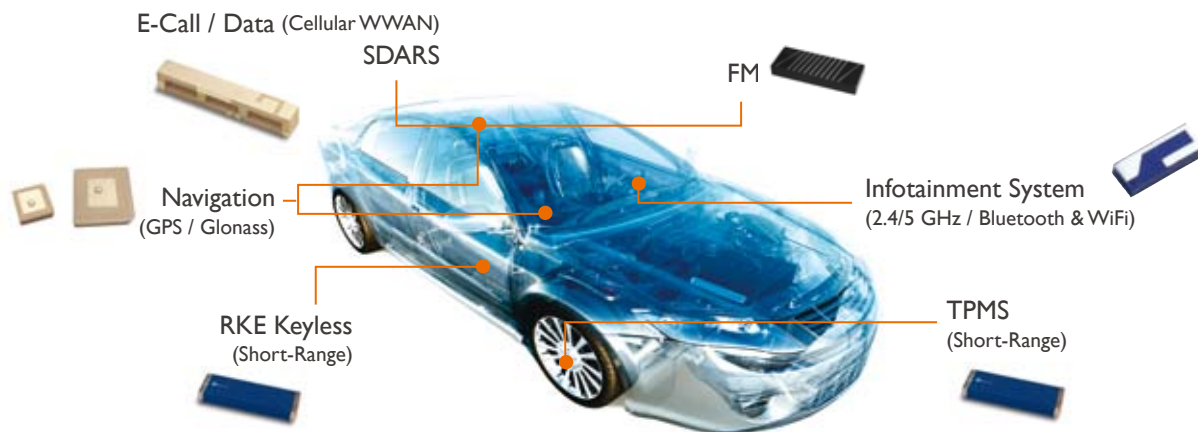
- Reliable adhesive tape, surface mount, and flexible cable/connector selection

Applications

Yageo's broad product offering of wireless components targets key vertical markets, such as: automotive, smart meter, smart home, wireless networking devices, tablet and mobile phones, and navigation & tracker, etc.

Automotive

Innovative electronic design is essential to meet the stringent requirements of automotive market. The applications cover: TPMS (Tyre Pressure Monitoring Systems), infotainment and navigation systems, Bluetooth connectivity, telematics.



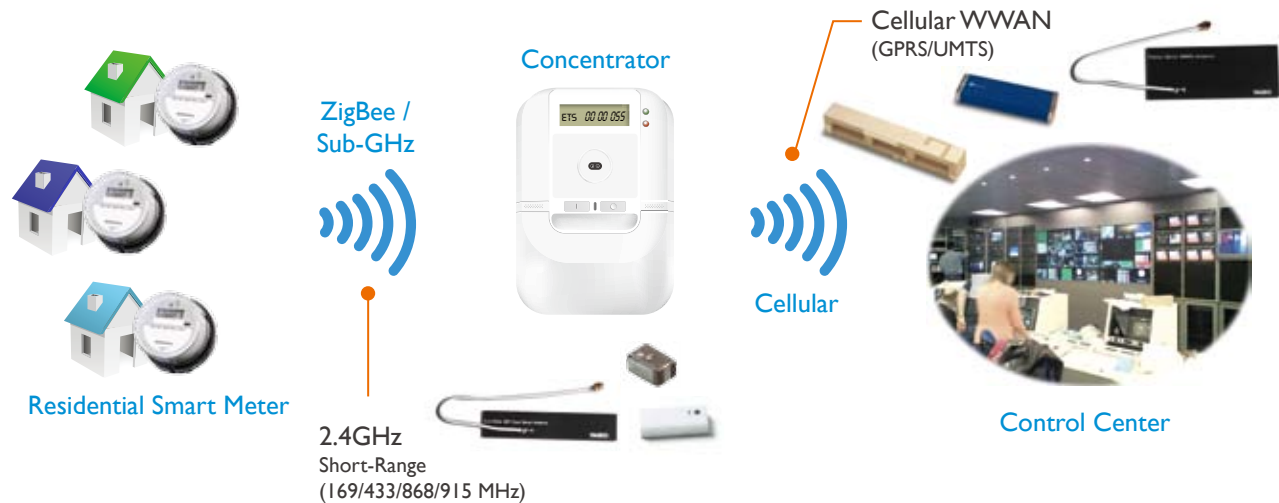
Product Series	Part Number (new)	Part Number (old)	Frequency range (MHz)	Gain	Size (mm)	Assembly
Cellular WWAN	ANT2112A010B0918A	CAN4313284109181B	824~960/ 1710~1990	0~1 dBi	21*12*0.5	SMD
	ANT3505B000TWPENA	CAN4313449009181B	824~960 / 1710~2170	2.9 dBi	35*5*6	SMD
	ANTX100P001BWPEN3	-	824~960/ 1710~2170	4.2 dBi	50*20*0.55	I-PEX dia 1.13, 100mm
2.4 GHz	ANT1204F001R2400A	CAN4311059012451K	2400~2500	6.66 dBi	12*4*2	SMD
	ANT8010LL04R2400A	CAN4311781042453K	2400~2500	5.88 dBi	8.0*1.0*1.0	SMD
	ANT5320LL45R2400A	CAN4311753452451K	2400~2500	5.5 dBi	5.3*2.0*1.2	SMD
	ANT3216A063R2400A	CAN4311212632453K	2400~2500	1.69 dBi	3.2*1.6*0.5	SMD
	ANT2012LL13R2400A	CAN4311714132454K	2400~2500	2.72 dBi	2.0*1.2*1	SMD
	ANTX200P001B24003	-	2400~2500	4.8 dBi	18.4*7.5*0.55	I-PEX dia 1.13, 200mm
GPS	ANT1515B00BT1575A	CAN43134230B1581B	1575	1.5 dBic	15*15*4	SMD
	ANT1515B00FT1575A	CAN43134230F1581B	1575	1.5 dBic	15*15*4	Pin Solder
	ANT1818B00BT1575A	CAN43134240B1581B	1575	4 dBic	18*18*4	SMD
	ANT1818B00FT1575A	CAN43134240F1581B	1575	4 dBic	18*18*4	Pin Solder
	ANT2525B00BT1575A	CAN43134250B1581B	1575	5.5 dBic	25*25*4	SMD
	ANT2525B00FT1575A	CAN43134250F1581B	1575	5.5 dBic	25*25*4	Pin Solder
GPS+Glonass	ANT1818B00BT1516A	CAN43134240B1561B	1575 / 1602	1.89 / 2.59 dBi	18*18*4	SMD
	ANT1818B00DT1516A	CAN43134240D1561B	1575 / 1602	2.65 / 2.79 dBi	18*18*4	Pin Solder
	ANT2525B00BT1516A	CAN43134250B1561B	1575 / 1602	3.44 / 4.10 dBi	25*25*4	SMD
	ANT2525B00DT1516A	CAN43134250D1561B	1575 / 1602	3.5 / 3.8 dBi	25*25*4	Pin Solder
SDARS	ANT2525B00DT2300A	CAN43134250D2301B	2300	6 dBic	25*25*4	Pin Solder
FM	ANT2405F001R0098A	CAN4311050010882K	88	N/A	24*5*1.6	SMD



Smart Meter

The smart grid is currently one of the fastest growing areas for the electricity supply industry. Smart grid systems and smart metering devices are secure, economical, and gaining ground throughout the world.

Regardless of which standards and technologies prevail in the long run, the key elements for smart meters will remain the components needed to construct the devices.



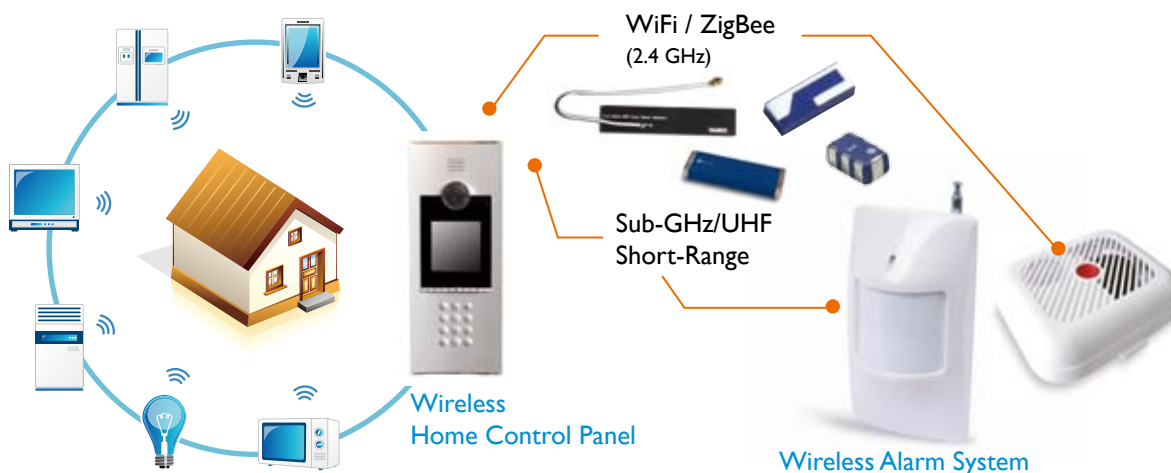
Product Series	Part Number (new)	Part Number (old)	Frequency range (MHz)	Gain (dBi)	Size (mm)	Assembly
Cellular WWAN	ANT2112A010B0918A	CAN4313284109181B	824~960/ 1710~1990	0~1	21*12*0.5	SMD
	ANT3505B000TVPEN3	CAN4313449009181B	824~960 /1710~2170	2.9	35*5*6	SMD
	ANT1204LL00R0918A	CAN4311759009181K	900/1800	N/A	12*4*1.2	SMD
	ANTX100P001BWPEN3	-	824~960/ 1710~2170	4.2	50*20*0.55	I-PEX dia 1.13, 100mm
2.4 GHz	ANT9520LL06R2400A	CAN4311795062452K	2400~2500	2.85	9.5*2.0*1.2	SMD
	ANT8010LL04R2400A	CAN4311781042453K	2400~2500	5.88	8.0*1.0*1.0	SMD
	ANT5320LL45R2400A	CAN4311753452451K	2400~2500	5.5	5.3*2.0*1.2	SMD
	ANT3216A063R2400A	CAN4311212632453K	2400~2500	1.69	3.2*1.6*0.5	SMD
	ANT2012LL13R2400A	CAN4311714132454K	2400~2500	2.72	2.0*1.2*1	SMD
	ANTX200P001B24003	-	2400~2500	4.8	18.4*7.5*0.55	I-PEX dia 1.13, 200mm
Short-Range	ANT1204LL05R0915A	CAN4311759050911K	915	3.32	12*4*1.6	SMD
	ANT1204LL08R0870A	CAN4311759080871K	870	0.5	12*4*1.6	SMD
	ANT7020LL05R0870A	CAN4311772050872K	870	N/A	7.0*2.0*0.7	SMD
	ANT1204F002R0433A	CAN4311059020431K	315/ 433	0.79	12*4*1.6	SMD
	ANT1204LL20R0433A	CAN4311759200431K	315/ 433	0.83	12*4*1.2	SMD
	ANT2405F001R0169A	CAN4311050010162K	169	N/A	24*5*1.2	SMD

Product Series	Part Number (new)	Part Number (old)	I.L (dB)	Attenuation I (dB)(min) @25°C	Attenuation II (dB)(min) @25°C
BPF	BPF2012LM09R2400A	CFL4111514092454K	1.2	15dB @ 1600 MHz	25dB @ 3200 MHz
	BPF1608LM02R2400A	CFL4111515022454K	1.7	20dB @ 1710~1990 MHz	8.5dB @ 2170 MHz
LPF	LPF1608LL53R2400A	CFL4111715532454K	0.48	35dB @ 4800~5000 MHz	27dB @ 7200~7500 MHz

Product Series	Part Number (new)	Part Number (old)	I.L (dB)	Balance Impedance	Attenuation I (dB) (min) @25°C
Balun	BLN1608LL00R2400A	CBA4711715002454K	1.2	50Ω	-
	BLN1608LL01R2400A	CBA4711715012454K	1.1	100Ω	-
Combo	BLF2012LL98R2400A	CBA4711714982454K	3.5	Conjugate match to CSR BC03/04 series	25dB (Min) @1300~1600MHz
	BLF2012LM37R2400A	CBA4711514372454K	2.8	Conjugate match to CSR BC04/05/06 series	20dB (Min) @1880~1990MHz

Smart Home

The home area network (HAN) refers to the ecosystem of devices within the home that are connected to the smart grid through a smart meter, through a home energy gateway, or directly in some cases. Some examples of these devices are in-home displays (IHDs) for power-consumption monitoring, smart appliances that respond to time-of-use pricing signals, smart thermostats that cycle the air conditioning in response to peak-load-reduction signaling from the utilities, or smart plugs that can monitor power consumption and control appliances.



Product Series	Part Number (new)	Part Number (old)	Frequency range (MHz)	Gain (dBi)	Size (mm)	Assembly
2.4 GHz	ANT9520LL06R2400A	CAN4311795062452K	2400~2500	2.85	9.5*2.0*1.2	SMD
	ANT8010LL04R2400A	CAN4311781042453K	2400~2500	5.88	8.0*1.0*1.0	SMD
	ANT5320LL45R2400A	CAN4311753452451K	2400~2500	5.5	5.3*2.0*1.2	SMD
	ANT3216A063R2400A	CAN4311212632453K	2400~2500	1.69	3.2*1.6*0.5	SMD
	ANT2012LL13R2400A	CAN4311714132454K	2400~2500	2.72	2.0*1.2*1	SMD
	ANTX200P001B24003	-	2400~2500	4.8	18.4*7.5*0.55	I-PEX dia 1.13, 200mm
Short-Range	ANT1204LL05R0915A	CAN4311759050911K	915	3.32	12*4*1.6	SMD
	ANT1204LL08R0870A	CAN4311759080871K	870	0.5	12*4*1.6	SMD
	ANT7020LL05R0870A	CAN4311772050872K	870	N/A	7.0*2.0*0.7	SMD
	ANT1204F002R0433A	CAN4311059020431K	315/ 433	0.79	12*4*1.6	SMD
	ANT1204LL20R0433A	CAN4311759200431K	315/ 433	0.83	12*4*1.2	SMD
	ANT2405F001R0169A	CAN4311050010162K	169	N/A	24*5*1.2	SMD

Product Series	Part Number (new)	Part Number (old)	I.L (dB)	Balance Impedance
Balun	BLN1608LL00R2400A	CBA4711715002454K	1.2	50Ω
	BLN1608LL01R2400A	CBA4711715012454K	1.1	100Ω

Product Series	Part Number (new)	Part Number (old)	I.L (dB)	Balance Impedance	Attenuation I (dB) (min) @25°C
Combo	BLF2012LL98R2400A	CBA4711714982454K	3.5	Conjugate match to CSR BC03/04 series	25dB (Min) @1300~1600MHz
	BLF2012LM37R2400A	CBA4711514372454K	2.8	Conjugate match to CSR BC04/05/06 series	20dB (Min) @1880~1990MHz

Product Series	Part Number (new)	Part Number (old)	I.L (dB)	Attenuation I (dB) (min) @25°C	Attenuation II (dB) (min) @25°C
BPF	BPF2012LM09R2400A	CFL4111514092454K	1.2	15dB @ 1600 MHz	25dB @ 3200 MHz
	BPF1608LM02R2400A	CFL4111515022454K	1.7	20dB @ 1710~1990 MHz	8.5dB @ 2170 MHz
LPF	LPF1608LL53R2400A	CFL4111715532454K	0.48	35dB @ 4800~5000 MHz	27dB @ 7200~7500 MHz



Tablet and Mobile Phone

Tablet PC and mobile phones are an A/V entertainment system, communications control center and important instrument of individual expression. They feature ease of use, long battery life, mobility, ability to multi-task, instant on/off and substantial breadth of applications.



Product Series	Part Number (new)	Part Number (old)	Frequency range (MHz)	Gain	Size (mm)	Assembly
2.4 GHz	ANT8010LL04R2400A	CAN4311781042453K	2400~2500	5.88 dBi	8.0*1.0*1.0	SMD
	ANT7836A003R2400A	CAN4311278032451K	2400~2500	3.93 dBi	7.8*3.6*0.5	SMD
	ANT5320LL45R2400A	CAN4311753452451K	2400~2500	5.5 dBi	5.3*2.0*1.2	SMD
	ANT3216A063R2400A	CAN4311212632453K	2400~2500	1.69 dBi	3.2*1.6*0.5	SMD
	ANT2012LL13R2400A	CAN4311714132454K	2400~2500	2.72 dBi	2.0*1.2*1	SMD
	ANTX200P001B24003	-	2400~2500	4.8 dBi	18.4*7.5*0.55	I-PEX dia 1.13, 200mm
2.4/5 GHz	ANT5320LL04R2455A	CAN4311753042522K	2400~2500/ 5150~5875	2.72 / 3.85 dBi	5.3*2.0*1.4	SMD
	ANT5320LL24R2455A	CAN4311753242522K	2400~2500/ 5150~5875	2.17 / 3.51 dBi	5.3*2.0*1.2	SMD
	ANTX100P001B24553	-	2400~2500/ 5150~5875	5.1 dBi	50*10*0.9	I-PEX dia 1.13, 200mm
GPS	ANT8010LL05R1575A	CAN4311781051583K	1575	0.67 dBi	8.0*1.0*1	SMD
	ANT6230LL01R1575A	CAN4311763011582K	1575	2.52 dBi	6.2*3.0*1.25	SMD
	ANT5320LL14R1575A	CAN4311753141582K	1575	3.16 dBi	5.3*2.0*1.2	SMD
	ANT3216LL15R1575A	CAN4311712151583K	1575	7.32 dBi	3.2*1.6*1.2	SMD
	ANT1010B00FT1575A	CAN43134200F1581B	1575	-0.4 dBic	10*10*4	Pin Solder
	ANT1212B00DT1575A	CAN43134220D1581B	1575	-1 dBic	12*12*4	Pin Solder
	ANT1515B00FT1575A	CAN43134230F1581B	1575	1.5 dBic	15*15*4	Pin Solder
	ANT1606JB12B1575A	CAN4313346121581B	1575	20 dB	20*6*6.4	Connector

Product Series	Part Number (new)	Part Number (old)	I.L (dB)	Attenuation I (dB) (min) @25°C	Attenuation II (dB) (min) @25°C
BPF	BPF2012LL22R2400A	CFL4111714222454K	2.5	32dB @ 1920~1980 MHz	16dB @ 2110~2170 MHz
	BPF2012LM47R2400A	CFL4111514472454K	1.8	35dB @ 1710~1990 MHz	30dB @ 2110~2170 MHz
	BPF1608LM07R2400A	CFL4111515072454K	3.2	40dB @ 1920~1990 MHz	35dB @ 2110~2170 MHz
	BPF1608LM17R2400A	CFL4111515172454K	2.7	35dB @ 1920~1990 MHz	25dB @ 2110~2170 MHz
	BPF1608LM11R2400A	CFL4111515112454K	1.8	20dB @ 1710~1990 MHz	6.5dB @ 2110~2170 MHz
Diplexer	DPX2012LL89R2455A	CFL4111714892524K	Low : 0.5 High: 0.65	20dB @ 1800~2500MHz	20dB @ 4800~5900MHz

Wireless Networking Device

A wireless networking device can be best defined as a network device used to connect terminal device without cables, normally through radio signals.

Some examples of a common wireless networking device are a wireless router / gateway, Set-Top-Box, and Femtocell.



Product Series	Part Number (new)	Part Number (old)	Frequency range (MHz)	Gain (dBi)	Size (mm)	Assembly
Cellular WWAN	ANT2112A010B0918A	CAN4313284109181B	824~960/ 1710~1990	0~1	21*12*0.5	SMD
	ANT3505B000TWPENA	CAN4313449009181B	824~960 /1710~2170	2.9	35*5*6	SMD
	ANT1204LL00R0918A	CAN4311759009181K	900/1800	N/A	12*4*1.2	SMD
	ANTX100P001BWPEN3	-	824~960/ 1710~2170	4.2	50*20*0.55	I-PEX dia 1.13, 100mm
2.4 GHz	ANT9520LL06R2400A	CAN4311795062452K	2400~2500	2.85	9.5*2.0*1.2	SMD
	ANT8010LL04R2400A	CAN4311781042453K	2400~2500	5.88	8.0*1.0*1.0	SMD
	ANT7836A003R2400A	CAN4311278032451K	2400~2500	3.93	7.8*3.6*0.5	SMD
	ANT5320LL45R2400A	CAN4311753452451K	2400~2500	5.5	5.3*2.0*1.2	SMD
	ANT3216A063R2400A	CAN4311212632453K	2400~2500	1.69	3.2*1.6*0.5	SMD
	ANT2012LL13R2400A	CAN4311714132454K	2400~2500	2.72	2.0*1.2*1	SMD
	ANTX200P001B24003	-	2400~2500	4.8	18.4*7.5*0.55	I-PEX dia 1.13, 200mm
	ANT1003LL05R2455A	CAN4311756052521K	2400~2500/ 5150~5875	2.5 / 2.48	10*3*1.6	SMD
2.4/5 GHz	ANT5320LL04R2455A	CAN4311753042522K	2400~2500/ 5150~5875	2.72 / 3.85	5.3*2.0*1.4	SMD
	ANT5320LL24R2455A	CAN4311753242522K	2400~2500/ 5150~5875	2.17 / 3.51	5.3*2.0*1.2	SMD
	ANTX100P001B24553	-	2400~2500/ 5150~5875	5.1	50*10*0.9	I-PEX dia 1.13, 200mm

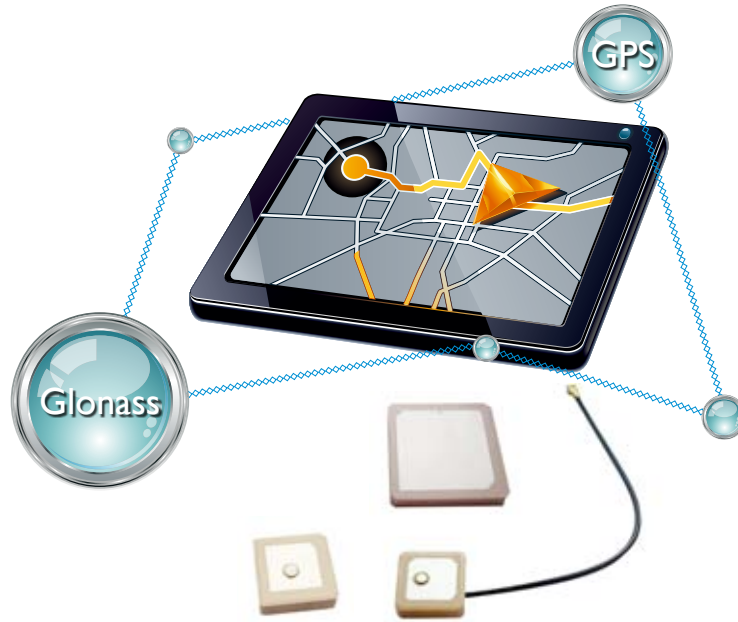
Product Series	Part Number (new)	Part Number (old)	I.L (dB)	Attenuation I (dB) (min) @25°C	Attenuation II (dB) (min) @25°C
BPF	BPF2012LM09R2400A	CFL4111514092454K	1.2	15dB @ 1600 MHz	25dB @ 3200 MHz
	BPF2012LL01R5000A	CFL4111714015004K	1.5	30dB @ 1280~3000 MHz	25dB @ 3300~4000 MHz
	BPF2012LL05R5000A	CFL4111714055004K	1.8	30dB @ 2400~2500 MHz	20dB @ 4700 MHz
	BPF1608LM02R2400A	CFL4111515022454K	1.7	20dB @ 1710~1990 MHz	8.5dB @ 2170 MHz
	BPF1608LM11R2400A	CFL4111515112454K	1.8	20dB @ 1710~1990 MHz	6.5dB @ 2110~2170 MHz
	LPF1608LL53R2400A	CFL4111715532454K	0.48	35dB @ 4800~5000 MHz	27dB @ 7200~7500 MHz
Diplexer	DPX2012LL85R2455A	CFL4111714852524K	Low : 0.7 High: 0.9	20dB @ 2400~2500MHz	20dB @ 4800~5900MHz
	DPX2012LL89R2455A	CFL4111714892524K	Low : 0.5 High: 0.65	20dB @ 1800~2500MHz	20dB @ 4800~5900MHz

Product Series	Part Number (new)	Part Number (old)	I.L (dB)	Balance Impedance
Balun	BLN1608LL00R2400A	CBA4711715002454K	1.2	50Ω
	BLN1608LL01R2400A	CBA4711715012454K	1.1	100Ω



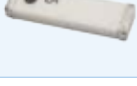
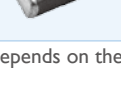
Navigation and Tracker

Though navigation and tracker are all related to GPS system and can be applied to vehicles, their purposes are different. Navigation is just like a road guide to tell you the right direction to your destination while GPS tracking device is mainly used for accurate location to make sure the target security.



Product Series	Part Number (new)	Part Number (old)	Frequency range (MHz)	Gain	Size (mm)	Assembly
2.4 GHz	ANT9520LL06R2400A	CAN4311795062452K	2400~2500	2.85 dBi	9.5*2.0*1.2	SMD
	ANT8010LL04R2400A	CAN4311781042453K	2400~2500	5.88 dBi	8.0*1.0*1.0	SMD
	ANT7836A003R2400A	CAN4311278032451K	2400~2500	3.93 dBi	7.8*3.6*0.5	SMD
	ANT5320LL45R2400A	CAN4311753452451K	2400~2500	5.5 dBi	5.3*2.0*1.2	SMD
	ANT3216A063R2400A	CAN4311212632453K	2400~2500	1.69 dBi	3.2*1.6*0.5	SMD
	ANT2012LL13R2400A	CAN4311714132454K	2400~2500	2.72 dBi	2.0*1.2*1	SMD
	ANTX200P001B24003	-	2400~2500	4.8 dBi	18.4*7.5*0.55	I-PEX dia 1.13, 200mm
2.4/5 GHz	ANT5320LL24R2455A	CAN4311753242522K	2400~2500/ 5150~5875	2.17 / 3.51 dBi	5.3*2.0*1.2	SMD
GPS	ANT6230LL01R1575A	CAN4311763011582K	1575	2.52 dBi	6.2*3.0*1.25	SMD
	ANT3216LL15R1575A	CAN4311712151583K	1575	7.32 dBi	3.2*1.6*1.2	SMD
	ANT1212B00DT1575A	CAN43134220D1581B	1575	-1 dBic	12*12*4	Pin Solder
	ANT1515B00FT1575A	CAN43134230F1581B	1575	1.5 dBic	15*15*4	Pin Solder
	ANT1818B00AT1575A	CAN43134240A1581B	1575	2 dBic	18*18*2	SMD
	ANT2525B00BT1575A	CAN43134250B1581B	1575	5.5 dBic	25*25*4	SMD
	ANT2525B00FT1575A	CAN43134250F1581B	1575	5.5 dBic	25*25*4	Pin Solder
GPS+Glonass	ANT1818B00BT1516A	CAN43134240B1561B	1575 / 1602	1.89 / 2.59 dBi	18*18*4	SMD
	ANT1818B00DT1516A	CAN43134240D1561B	1575 / 1602	2.65 / 2.79 dBi	18*18*4	Pin Solder
	ANT2525B00BT1516A	CAN43134250B1561B	1575 / 1602	3.44 / 4.10 dBi	25*25*4	SMD
	ANT2525B00DT1516A	CAN43134250D1561B	1575 / 1602	3.5 / 3.8 dBi	25*25*4	Pin Solder
Active GPS	ANT1212JB27B1575A	CAN4313322271581B	1575	25 dB	12*12*6.5	Connector
	ANT1818JB30B1575A	CAN4313324301581B	1575	25 dB	18*18*7.1	Connector
	ANT2525JB08B1575A	CAN4313325081581B	1575	16 dB	25*25*7.5	Connector
	ANT1606JB12B1575A	CAN4313346121581B	1575	20 dB	20*6*6.4	Connector
Active GPS+Glonass	ANT8010JLC11575A	CAN4313981C11561B	1575 / 1602	20/20 dB	22*6*1.9	Connector

Product Information - 2.4/5 GHz

2.4 GHz			
Model	Part No./ Description	Electrical Data	Mechanical Data
	ANT1204F001R2400A / CAN4311059012451K I204 2.4GHz PIFA Chip Antenna	Freq. Range: 2400~2500 MHz VSWR * : 2.0 (Max) Polarization: Linear Peak Gain : 6.66 dBi(Typ.)	Size (mm) : 12*4*2.0 Operating Temp.: -40 ~ 105°C RoHS Compliance
	ANT1004F002R2400A / CAN4311041022451K I004 2.4GHz PIFA Chip Antenna	Freq. Range: 2400~2500 MHz VSWR * : 2.0 (Max) Polarization: Linear Peak Gain : 1.55 dBi(Typ.)	Size (mm) : 10*4*2.0 Operating Temp.: -40 ~ 105°C RoHS Compliance
	ANT9520LL06R2400A / CAN4311795062452K 9520 2.4GHz Chip Antenna	Freq. Range: 2400~2500 MHz VSWR * : 2.5 (Max) Polarization: Linear Peak Gain : 2.85 dBi(Typ.)	Size (mm) : 9.5*2.0*1.2 Operating Temp.: -40 ~ 105°C RoHS Compliance
	ANT8010LL04R2400A / CAN4311781042453K 8010 2.4GHz Chip Antenna	Freq. Range: 2400~2500 MHz VSWR * : 2.0 (Max) Polarization: Linear Peak Gain : 5.88 dBi(Typ.)	Size (mm) : 8.0*1.0*1.0 Operating Temp.: -40 ~ 105°C RoHS Compliance
	ANT7836A003R2400A / CAN4311278032451K 7836 2.4GHz Chip Antenna	Freq. Range: 2400~2500 MHz VSWR * : 2.0 (Max) Polarization: Linear Peak Gain : 3.93 dBi dBi(Typ.)	Size (mm) : 7.8*3.6*0.5 Operating Temp.: -40 ~ 105°C RoHS Compliance
	ANT7020LL05R2400A / CAN4311772052452K 7020 2.4GHz Chip Antenna	Freq. Range: 2400~2500 MHz VSWR * : 2.8 (Max) Polarization: Linear Peak Gain : 2.62 dBi dBi(Typ.)	Size (mm) : 7.0*2.0*0.8 Operating Temp.: -40 ~ 105°C RoHS Compliance
	ANT5320LL45R2400A / CAN4311753452451K 5320 2.4GHz Chip Antenna	Freq. Range: 2400~2500 MHz VSWR * : 2.0 (Max) Polarization: Linear Peak Gain : 5.5 dBi dBi(Typ.)	Size (mm) : 5.3*2.0*1.2 Operating Temp.: -40 ~ 105°C RoHS Compliance
	ANT5320LL24R2400A / CAN4311753242452K 5320 2.4GHz PIFA Chip Antenna	Freq. Range: 2400~2500 MHz VSWR * : 2.0 (Max) Polarization: Linear Peak Gain : 2.78 dBi(Typ.)	Size (mm) : 5.3*2.0*1.25 Operating Temp.: -40 ~ 105°C RoHS Compliance
	ANT5010LL04R2400A / CAN4311751042453K 5010 2.4GHz Chip Antenna	Freq. Range: 2400~2500 MHz VSWR * : 2.8 (Max) Polarization: Linear Peak Gain : 2.28 dBi(Typ.)	Size (mm) : 5.0*1.0*1.0 Operating Temp.: -40 ~ 105°C RoHS Compliance
	ANT3216LL00R2400A / CAN4311712002453K 3216 2.4Ghz Chip Antenna	Freq. Range: 2400~2500 MHz VSWR * : 2.5 (Max) Polarization: Linear Peak Gain : 5 dBi(Typ.)	Size (mm) : 3.2*1.6*1.3 Operating Temp.: -40 ~ 105°C RoHS Compliance
	ANT3216A063R2400A / CAN4311212632453K 3216 2.4GHz PIFA Chip Antenna	Freq. Range: 2400~2500 MHz VSWR * : 2.0 (Max) Polarization: Linear Peak Gain : 1.69 dBi(Typ.)	Size (mm) : 3.2*1.6*0.5 Operating Temp.: -40 ~ 105°C RoHS Compliance
	ANT3012LL04R2400A / CAN4311792042453K 3012 2.4GHz Chip Antenna	Freq. Range: 2400~2500 MHz VSWR * : 2.0 (Max) Polarization: Linear Peak Gain : 1.84 dBi(Typ.)	Size (mm) : 3.0*1.2*1.2 Operating Temp.: -40 ~ 105°C RoHS Compliance

* VSWR depends on the environment



2.4 GHz

Model	Part No./ Description	Electrical Data	Mechanical Data
	ANT2012LL13R2400A / CAN4311714132454K 2012 2.4GHz PIFA Chip Antenna	Freq. Range : 2400~2500 MHz VSWR * : 2.0 (Max) Polarization : Linear Peak Gain : 2.72 dBi(Typ.)	Size (mm) : 2.0*1.2*1.0 Operating Temp. : -40 ~ 105°C RoHS Compliance
	ANTX200P001B24003 2.4GHz PCB Antenna - mini	Freq. Range : 2400 MHz VSWR * : 2.5 (Max) Polarization : Linear Peak Gain : 4.8 dBi(Typ.)	Size (mm) : 18.4*7.5*0.55 Operating Temp. : -40 ~ 80°C RoHS Compliance

2.4 / GPS

Model	Part No./ Description	Electrical Data	Mechanical Data
	ANT1003LL15R1524A / CAN4311756151521K 1003 2.4GHz+GPS PIFA Chip Antenna	Freq. Range : 1575 / 2400 MHz VSWR * : 2.8 (Max) Polarization : Linear Peak Gain : 1.15 dBi / 2.90 dBi(Typ.)	Size (mm) : 10*3*1.5 Operating Temp. : -40 ~ 105°C RoHS Compliance
	ANT5320LL07R1524A / CAN4311753071522K 5320 2.4GHz+GPS PIFA Chip Antenna	Freq. Range : 1575 / 2400 MHz VSWR * : 2.0 (Max) Polarization : Linear Peak Gain : 2.47 dBi / 2.04 dBi(Typ.)	Size (mm) : 5.3*2.0*1.2 Operating Temp. : -40 ~ 105°C RoHS Compliance

2.4 / 5 GHz

Model	Part No./ Description	Electrical Data	Mechanical Data
	ANT1003LL05R2455A / CAN4311756052521K 1003 2.4+5GHz Chip Antenna	Freq. Range : 2400~2500/ 5150~5875 MHz VSWR * : 2.8 (Max) Polarization : Linear Peak Gain : 2.5 dBi / 2.48dBi(Typ.)	Size (mm) : 10*3*1.6 Operating Temp. : -40 ~ 105°C RoHS Compliance
	ANT5320LL04R2455A / CAN4311753042522K 5320 2.4+5GHz Chip Antenna	Freq. Range : 2400~2500/ 5150~5875 MHz VSWR * : 2.8 (Max) Polarization : Linear Peak Gain : 2.72 dBi / 3.85dBi(Typ.)	Size (mm) : 5.3*2.0*1.4 Operating Temp. : -40 ~ 105°C RoHS Compliance
	ANT5320LL24R2455A / CAN4311753242522K 5320 2.4+5GHz PIFA Chip Antenna	Freq. Range : 2400~2500/ 5150~5875 MHz VSWR * : 2.8 (Max) Polarization : Linear Peak Gain : 2.17 dBi / 3.51dBi(Typ.)	Size (mm) : 5.3*2.0*1.2 Operating Temp. : -40 ~ 105°C RoHS Compliance
	ANTX100P001B24553 2.4+5GHz PCB Antenna	Freq. Range : 2400~2500/ 5150~5875 MHz VSWR * : 2.5 (Max) Polarization : Linear Peak Gain : 5.1dBi(Typ.)	Size (mm) : 50*10*0.9 Operating Temp. : -40 ~ 80°C RoHS Compliance

5 GHz

Model	Part No./ Description	Electrical Data	Mechanical Data
	ANT3216LL05R5000A / CAN4311712055003K 3216 5GHz Chip Antenna	Freq. Range : 5150~5875 MHz VSWR * : 2.0 (Max) Polarization : Linear Peak Gain : 5.71 dBi(Typ.)	Size (mm) : 3.2*1.6*1.3 Operating Temp. : -40 ~ 105°C RoHS Compliance

* VSWR depends on the environment

Product Information - Cellular WWAN / Short Range

Cellular WWAN			
Model	Part No./ Description	Electrical Data	Mechanical Data
	ANT2112A010B0918A / CAN4313284109181B 2112 Cellular-Band Chip Antenna	Freq. Range : 824~960 / 1710~1990 MHz VSWR* : 2.0 (Max) Polarization: Linear Peak Gain : 0.5 ~ 1 dBi(Typ.)	Size (mm) : 21*12*0.5 Operating Temp.: -40 ~ 105°C RoHS Compliance
	ANT3505B000TWPENA / CAN4313449009181B 3505 Penta-band Antenna	Freq. Range : 824~960 / 1710~2170 MHz VSWR* : 2.8 / 3.5 (Max) Polarization: Linear Peak Gain : 2.9 dBi(Typ.)	Size (mm) : 35*5*6 Operating Temp.: -40 ~ 105°C RoHS Compliance
	ANT1204LL00R0918A / CAN4311759009181K 1204 Cellular-Band Chip Antenna	Freq. Range : 900/1800 MHz VSWR* : 3.0 (Max) Polarization: Linear Peak Gain : N/A	Size (mm) : 12*4*1.2 Operating Temp.: -40 ~ 105°C RoHS Compliance
	ANTX100P001BWPEN3 Penta-band PCB Antenna	Freq. Range : 824~960 / 1710~2170 MHz VSWR* : 2.5 Max (Low Band) 3.5 Max (High Band) Polarization: Linear Peak Gain : 4.2 dBi(Typ.)	Size (mm) : 50*20*0.55 Operating Temp.: -40 ~ 80°C Cable* : Φ1.13 / 100mm Connector: I-PEX Mounting: Adhesive Tape RoHS Compliance
Short-Range			
Model	Part No./ Description	Electrical Data	Mechanical Data
	ANT1204LL05R0915A / CAN4311759050911K 1204 915MHz Chip Antenna	Freq. Range : 915 MHz VSWR* : 2.0 (Max) Polarization: Linear Peak Gain : 3.32 dBi(Typ.)	Size (mm) : 12*4*1.6 Operating Temp.: -40 ~ 105°C RoHS Compliance
	ANT1204LL08R0870A / CAN4311759080871K 1204 870MHz Chip Antenna	Freq. Range : 870 MHz VSWR* : 2.0 (Max) Polarization: Linear Peak Gain : 0.5 dBi(Typ.)	Size (mm) : 12*4*1.6 Operating Temp.: -40 ~ 105°C RoHS Compliance
	ANT1204LL17R0870A / CAN4311759170871K 1204 870MHz PIFA Chip Antenna	Freq. Range : 870 MHz VSWR* : 2.8 (Max) Polarization: Linear Peak Gain : 1.05 dBi(Typ.)	Size (mm) : 12*4*1.0 Operating Temp.: -40 ~ 105°C RoHS Compliance
	ANT7020LL05R0870A / CAN4311772050872K 7020 870MHz Chip Antenna	Freq. Range : 870 MHz VSWR* : 2.0 (Max) Polarization: Linear Peak Gain : N/A	Size (mm) : 7.0*2.0*0.7 Operating Temp.: -40 ~ 105°C RoHS Compliance
	ANT1204F002R0433A / CAN4311059020431K 1204 433MHz Chip Antenna	Freq. Range : 315/ 433 MHz VSWR* : 2.0 (Max) Polarization: Linear Peak Gain : 0.79 dBi(Typ.)	Size (mm) : 12*4*1.6 Operating Temp.: -40 ~ 105°C RoHS Compliance
	ANT1204LL20R0433A / CAN4311759200431K 1204 433MHz Chip Antenna	Freq. Range : 315/ 433 MHz VSWR* : 3.0 (Max) Polarization: Linear Peak Gain : 0.83 dBi(Typ.)	Size (mm) : 12*4*1.2 Operating Temp.: -40 ~ 105°C RoHS Compliance
	ANT2405F001R0169A / CAN4311050010162K 2405 169MHz Chip Antenna	Freq. Range : 169 MHz VSWR* : 2.0 (Max) Polarization: Linear Peak Gain : N/A	Size (mm) : 24*5*1.6 Operating Temp.: -40 ~ 105°C RoHS Compliance

* VSWR depends on the environment

* Cable/Connector is customizable



Product Information - GPS

GPS			
Model	Part No./ Description	Electrical Data	Mechanical Data
	ANT8010LL05R1575A / CAN4311781051583K 8010 GPS Chip Antenna	Freq. Range : 1575 MHz VSWR * : 2.0 (Max) Polarization : Linear Peak Gain : 0.67 dBi(Typ.)	Size (mm) : 8.0*1.0*1.0 Operating Temp. : -40 ~ 105°C RoHS Compliance
	ANT6230LL01R1575A / CAN4311763011582K 6230 GPS Chip Antenna	Freq. Range : 1575 MHz VSWR * : 2.0 (Max) Polarization : Linear Peak Gain : 2.52 dBi(Typ.)	Size (mm) : 6.2*3.0*1.25 Operating Temp. : -40 ~ 105°C RoHS Compliance
	ANT5320LL14R1575A / CAN4311753141582K 5320 GPS PIFA Chip Antenna	Freq. Range : 1575 MHz VSWR * : 2.0 (Max) Polarization : Linear Peak Gain : 3.16 dBi(Typ.)	Size (mm) : 5.3*2.0*1.2 Operating Temp. : -40 ~ 105°C RoHS Compliance
	ANT3216LL15R1575A / CAN4311712151583K 3216 GPS PIFA Chip Antenna	Freq. Range : 1575 MHz VSWR * : 2.0 (Max) Polarization : Linear Peak Gain : 7.32 dBi(Typ.)	Size (mm) : 3.2*1.6*1.2 Operating Temp. : -40 ~ 105°C RoHS Compliance
	ANT1010B00FT1575A / CAN43134200F1581B 10104 GPS Patch Antenna	Freq. Range : 1575 MHz VSWR * : 2.0 (Max) Polarization : RHCP Peak Gain : -3 dBic(Typ.)	Size (mm) : 10*10*4 Operating Temp. : -40 ~ 105°C Mounting : PIN RoHS Compliance
	ANT1212B00BT1575A / CAN43134220B1581B 12124 GPS Patch Antenna	Freq. Range : 1575 MHz VSWR * : 2.0 (Max) Polarization : RHCP Peak Gain : -1 dBic(Typ.)	Size (mm) : 12*12*4 Operating Temp. : -40 ~ 105°C Mounting : SMD RoHS Compliance
	ANT1212B00DT1575A / CAN43134220D1581B 12124 GPS Patch Antenna	Freq. Range : 1575 MHz VSWR * : 2.0 (Max) Polarization : RHCP Peak Gain : -1 dBic(Typ.)	Size (mm) : 12*12*4 Operating Temp. : -40 ~ 105°C Mounting : PIN RoHS Compliance
	ANT1515B00BT1575A / CAN43134230B1581B 15154 GPS Patch Antenna	Freq. Range : 1575 MHz VSWR * : 2.0 (Max) Polarization : RHCP Peak Gain : 1.5 dBic(Typ.)	Size (mm) : 15*15*4 Operating Temp. : -40 ~ 105°C Mounting : SMD RoHS Compliance
	ANT1515B00DT1575A / CAN43134230D1581B 15154 GPS Patch Antenna	Freq. Range : 1575 MHz VSWR * : 2.0 (Max) Polarization : RHCP Peak Gain : 1.5 dBic(Typ.)	Size (mm) : 15*15*4 Operating Temp. : -40 ~ 105°C Mounting : PIN RoHS Compliance
	ANT1515B00FT1575A / CAN43134230F1581B 15154 GPS Patch Antenna	Freq. Range : 1575 MHz VSWR * : 2.0 (Max) Polarization : RHCP Peak Gain : 1.5 dBic(Typ.)	Size (mm) : 15*15*4 Operating Temp. : -40 ~ 105°C Mounting : PIN RoHS Compliance
	ANT1818B00AT1575A / CAN43134240A1581B 18182 GPS Patch Antenna	Freq. Range : 1575 MHz VSWR * : 2.0 (Max) Polarization : RHCP Peak Gain : 2 dBic(Typ.)	Size (mm) : 18*18*2 Operating Temp. : -40 ~ 105°C Mounting : SMD RoHS Compliance
	ANT1818B00BT1575A / CAN43134240B1581B 18184 GPS Patch Antenna	Freq. Range : 1575 MHz VSWR * : 2.0 (Max) Polarization : RHCP Peak Gain : 4 dBic(Typ.)	Size (mm) : 18*18*4 Operating Temp. : -40 ~ 105°C Mounting : SMD RoHS Compliance

* VSWR depends on the environment

GPS			
Model	Part No./ Description	Electrical Data	Mechanical Data
	ANT1818B00CT1575A / CAN43134240C1581B 18182 GPS Patch Antenna	Freq. Range: 1575 MHz VSWR * : 2.0 (Max) Polarization: RHCP Peak Gain: 2 dBic(Typ.)	Size (mm): 18*18*2 Operating Temp. : -40 ~ 105°C Mounting: PIN RoHS Compliance
	ANT1818B00DT1575A / CAN43134240D1581B 18184 GPS Patch Antenna	Freq. Range: 1575 MHz VSWR * : 2.0 (Max) Polarization: RHCP Peak Gain: 4 dBic(Typ.)	Size (mm): 18*18*4 Operating Temp. : -40 ~ 105°C Mounting: PIN RoHS Compliance
	ANT1818B00ET1575A / CAN43134240E1581B 18182 GPS Patch Antenna	Freq. Range: 1575 MHz VSWR * : 2.0 (Max) Polarization: RHCP Peak Gain: 2 dBic(Typ.)	Size (mm): 18*18*2 Operating Temp. : -40 ~ 105°C Mounting: PIN RoHS Compliance
	ANT2525B00AT1575A / CAN43134250A1581B 25252 GPS Patch Antenna	Freq. Range: 1575 MHz VSWR * : 2.0 (Max) Polarization: RHCP Peak Gain: 5 dBic(Typ.)	Size (mm): 25*25*2 Operating Temp. : -40 ~ 105°C Mounting: SMD RoHS Compliance
	ANT2525B00BT1575A / CAN43134250B1581B 25254 GPS Patch Antenna	Freq. Range: 1575 MHz VSWR * : 2.0 (Max) Polarization: RHCP Peak Gain: 5.5 dBic(Typ.)	Size (mm): 25*25*4 Operating Temp. : -40 ~ 105°C Mounting: SMD RoHS Compliance
	ANT2525B00CT1575A / CAN43134250C1581B 25252 GPS Patch Antenna	Freq. Range: 1575 MHz VSWR * : 2.0 (Max) Polarization: RHCP Peak Gain: 5 dBic(Typ.)	Size (mm): 25*25*2 Operating Temp. : -40 ~ 105°C Mounting: PIN RoHS Compliance
	ANT2525B00DT1575A / CAN43134250D1581B 25254 GPS Patch Antenna	Freq. Range: 1575 MHz VSWR * : 2.0 (Max) Polarization: RHCP Peak Gain: 5.5 dBic(Typ.)	Size (mm): 25*25*4 Operating Temp. : -40 ~ 105°C Mounting: PIN RoHS Compliance
	ANT2525B00ET1575A / CAN43134250E1581B 25252 GPS Patch Antenna	Freq. Range: 1575 MHz VSWR * : 2.0 (Max) Polarization: RHCP Peak Gain: 5 dBic(Typ.)	Size (mm): 25*25*2 Operating Temp. : -40 ~ 105°C Mounting: PIN RoHS Compliance
	ANT2525B00FT1575A / CAN43134250F1581B 25254 GPS Patch Antenna	Freq. Range: 1575 MHz VSWR * : 2.0 (Max) Polarization: RHCP Peak Gain: 5.5 dBic(Typ.)	Size (mm): 25*25*4 Operating Temp. : -40 ~ 105°C Mounting: PIN RoHS Compliance
	ANT1606B00DT1575A / CAN43134460D1581B 16064 GPS Patch Antenna	Freq. Range: 1575 MHz VSWR * : 2.0 (Max) Polarization: Linear Peak Gain: -0.5 dBic(Typ.)	Size (mm): 16*6*4 Operating Temp. : -40 ~ 105°C Mounting: PIN RoHS Compliance
	ANT1004B000R1575A / CAN4311441001581K 10044 GPS Patch Antenna	Freq. Range: 1575 MHz VSWR * : 2.0 (Max) Polarization: Linear Peak Gain: 1.61 dBic(Typ.)	Size (mm): 10*4*4 Operating Temp. : -40 ~ 105°C Mounting: SMD RoHS Compliance

* VSWR depends on the environment



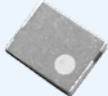
Product Information - GPS / Glonass / Active Antenna

GPS+Glonass			
Model	Part No./ Description	Electrical Data	Mechanical Data
	ANT1818B00BT1516A / CAN43134240B1561B 18184 Gps+Glonass Patch Antenna	Freq. Range: 1575 / 1602 MHz VSWR *: 2.0 (Max) Polarization: Linear Peak Gain: 1.89 / 2.59 dBi(Typ.)	Size (mm): 18*18*4 Operating Temp.: -40 ~ 105°C Mounting: SMD RoHS Compliance
	ANT1818B00DT1516A / CAN43134240D1561B 18184 Gps+Glonass Patch Antenna	Freq. Range: 1575 / 1602 MHz VSWR *: 2.0 (Max) Polarization: Linear Peak Gain: 2.65 / 2.79 dBi (Typ.)	Size (mm): 18*18*4 Operating Temp.: -40 ~ 105°C Mounting: PIN RoHS Compliance
	ANT2525B00BT1516A / CAN43134250B1561B 25254 Gps+Glonass Patch Antenna	Freq. Range: 1575 / 1602 MHz VSWR *: 2.0 (Max) Polarization: Linear Peak Gain: 3.44 / 4.10 dBi (Typ.)	Size (mm): 25*25*4 Operating Temp.: -40 ~ 105°C Mounting: SMD RoHS Compliance
	ANT2525B00DT1516A / CAN43134250D1561B 25254 Gps+Glonass Patch Antenna	Freq. Range: 1575 / 1602 MHz VSWR *: 2.0 (Max) Polarization: Linear Peak Gain: 3.5 / 3.8 dBi (Typ.)	Size (mm): 25*25*4 Operating Temp.: -40 ~ 105°C Mounting: PIN RoHS Compliance
Active GPS			
Model	Part No./ Description	Electrical Data	Mechanical Data
	ANT2525JB08B1575A / CAN43133250B1581B 25256.9 GPS Active Antenna	Freq. Range: 1575 MHz VSWR *: 2.0 (Max) Polarization: RHCP LNA Gain: 16 dB (Typ.) Antenna Gain: 5.5 dBic(Typ.)	Size (mm): 25*25*6.9 Cable * (mm): 1.13*75 Operating Temp.: -30 ~ 85°C RoHS Compliance
	ANT1818JB30B1575A / CAN431332430B1581B 18187.1 GPS Active Antenna	Freq. Range: 1575 MHz VSWR *: 2.0 (Max) Polarization: RHCP LNA Gain: 25 dB (Typ.) Antenna Gain: 1.54 dBic(Typ.)	Size (mm): 18*18*7.1 Cable * (mm): 1.37*100 Operating Temp.: -30 ~ 85°C RoHS Compliance
	ANT1515JB27B1575A / CAN431332327B1581B 15156.5 GPS Active Antenna	Freq. Range: 1575 MHz VSWR *: 2.0 (Max) Polarization: RHCP LNA Gain: 20.5 dB (Typ.) Antenna Gain: 1.0 dBic(Typ.)	Size (mm): 15*15*6.5 Cable * (mm): 1.13*100 Operating Temp.: -30 ~ 85°C RoHS Compliance
	ANT1212JB27B1575A / CAN431332227B1581B 12126.5 GPS Active Antenna	Freq. Range: 1575 MHz VSWR *: 1.5 (Max) Polarization: RHCP LNA Gain: 25 dB (Typ.) Antenna Gain: -0.16 dBic(Typ.)	Size (mm): 12*12*6.5 Cable * (mm): 1.13*60 Operating Temp.: -30 ~ 85°C RoHS Compliance
	ANT1606JB12B1575A / CAN431334612B1581B 20066.4 GPS Active Antenna	Freq. Range: 1575 MHz VSWR *: 2.0 (Max) Polarization: Linear LNA Gain: 20 dB (Typ.) Antenna Gain: 0.35 dBi (Typ.)	Size (mm): 20*6*6.4 Cable * (mm): 1.37*93 Operating Temp.: -30 ~ 85°C RoHS Compliance
Active GPS+Glonass			
Model	Part No./ Description	Electrical Data	Mechanical Data
	ANT8010JLC1B1516A / CAN4313981C11561B 22061.9 GPS+Glonass Active Antenna	Freq. Range: 1575/1602 MHz VSWR *: 2.0 (Max) Polarization: Linear LNA Gain: 20 / 20 dB (Typ.) Antenna Gain: 5.88 dBi(Typ.)	Size (mm): 22*6*1.9 Cable * (mm): 1.13*100 Operating Temp.: -30 ~ 85°C RoHS Compliance

* VSWR depends on the environment

* Cable/Connector is customizable

Product Information - Others

FM			
Model	Part No./ Description	Electrical Data	Mechanical Data
	ANT2405F001R0098A / CAN4311050010882K 2405 FM Chip Antenna	Freq. Range : 88 MHz VSWR * : 2.0 (Max) Polarization : Linear Peak Gain : N/A	Size (mm) : 24*5*1.6 Operating Temp. : -40 ~ 105°C RoHS Compliance
	ANT1105LF00R0098A / CAN4311858000882K 1105 FM (Ferrite) Chip Antenna	Freq. Range : 88 MHz VSWR * : 2.0 (Max) Polarization : Linear Peak Gain : N/A	Size (mm) : 11*5*1.3 Operating Temp. : -40 ~ 105°C RoHS Compliance
SDARS			
Model	Part No./ Description	Electrical Data	Mechanical Data
	ANT2525B00DT2300A / CAN43134250D2301B 25254 SDARS Patch Antenna	Freq. Range : 2320~2345 MHz VSWR * : 2.0 (Max) Polarization : LHCP Peak Gain : 6 dBi(Typ.)	Size (mm) : 25*25*4 Operating Temp. : -40 ~ 105°C Mounting : PIN RoHS Compliance
1.88~2.1 GHz			
Model	Part No./ Description	Electrical Data	Mechanical Data
	ANT8868LL00R1880A / CAN4311788001881K 8868 DECT Chip Antenna	Freq. Range : 1880~2000 MHz VSWR * : 2.0 (Max) Polarization : Linear Peak Gain : 6.13 dBi(Typ.)	Size (mm) : 8.8*6.8*0.9 Operating Temp. : -40 ~ 105°C RoHS Compliance

* VSWR depends on the environment

Product Information - Filters

Filter (BPF)				
Model	Part No./ Description	Electrical Data		Mechanical Data
	BPF2012LL05R2400A / CFL4111714052454K 2012 2.4G BPF Type05, H.R.3.2G	Freq. Range: 2400-2500MHz Insertion Loss: 2.0dB (Max) VSWR * : 2.0 (Max)	Attenuation: 24dB Min @ 3200MHz 30dB Min @ 4800~5000MHz 20dB Min @ 7200~7500MHz	Size(mm): 2.0*1.2*0.9 Operating Temp.: -40~85°C RoHS Compliance
	BPF2012LL22R2400A / CFL4111714222454K 2012 2.4G BPF Type22, H.R.2.1G	Freq. Range: 2400-2500 MHz Insertion Loss: 2.5 dB (Max.) VSWR * : 2.0 (Max)	Attenuation: 30dB Min @ 824~915 MHz 32dB Min @ 1920~1980 MHz 16dB Min @ 2110~2170 MHz 35dB Min @ 4800~5000 MHz 23dB Min @ 7200~7500 MHz	Size(mm): 2.0*1.2*0.5 Operating Temp.: -40~85°C RoHS Compliance
	BPF2012LM17R2400A / CFL4111514172454K 2012 2.4G BPF Type17, H.R.2.1G	Freq. Range: 2400-2500 MHz Insertion Loss: 2.6dB (Max.) VSWR * : 2.0 (Max)	Attenuation: 40dB Min @ 880~960 MHz 40dB Min @ 1710~1990 MHz 20dB Min @ 2110~2170 MHz 30dB Min @ 4800~5000 MHz 30dB Min @ 7200~7500 MHz	Size(mm): 2.0*1.2*0.9 Operating Temp.: -25~85°C RoHS Compliance
	BPF2012LM47R2400A / CFL4111514472454K 2012 2.4G BPF Type47, H.R.2.1G	Freq. Range: 2400-2500MHz Insertion Loss: 1.8dB (Max) VSWR * : 2.0 (Max)	Attenuation: 30dB Min @ 824~915 MHz 30dB Min @ 1545~1605 MHz 35dB Min @ 1710~1990 MHz 30dB Min @ 2170 MHz 30dB Min @ 4800~5000 MHz 25dB Min @ 7200~7500 MHz	Size(mm): 2.0*1.2*0.8 Operating Temp.: -40~85°C RoHS Compliance
	BPF2012LM09R2400A / CFL4111514092454K 2012 2.4G BPF Type09	Freq. Range: 2400-2500MHz Insertion Loss: 1.2dB (Max) VSWR * : 2.0 (Max)	Attenuation: 15dB Min @ 1600MHz 25dB Min @ 3200MHz 20dB Min @ 4800~5000MHz	Size(mm): 2.0*1.2*0.9 Operating Temp.: -40~85°C RoHS Compliance
	BPF2012LL01R5000A / CFL4111714015004K 2012 5G BPF Type01	Freq. Range: 4900-5950 MHz Insertion Loss: 1.5dB (Max) VSWR * : 2.0 (Max)	Attenuation: 30dB Min @ 1280~3000MHz 25dB Min @ 3300~4000MHz 25dB Min @ 9800~11900MHz	Size(mm): 2.0*1.2*1 Operating Temp.: -40~85°C RoHS Compliance
	BPF2012LL05R5000A / CFL4111714055004K 2012 5G BPF Type05	Freq. Range: 5150-5850 MHz Insertion Loss: 1.8dB (Max) VSWR * : 2.0 (Max)	Attenuation: 30dB Min @ 2400~2500MHz 20dB Min @ 4700MHz	Size(mm): 2.0*1.2*0.8 Operating Temp.: -40~85°C RoHS Compliance
	BPF1608LM02R2400A / CFL4111515022454K 1608 2.4G BPF Type02	Freq. Range: 2400-2500 MHz Insertion Loss: 1.7 dB (Max) VSWR * : 2.0 (Max)	Attenuation: 30dB Min @ 880~960 MHz 20dB Min @ 1710~1990 MHz 8.5dB Min @ 2170 MHz 20dB Min @ 4800~5000 MHz 25dB Min @ 7200~7500 MHz	Size(mm): 1.6*0.8*0.6 Operating Temp.: -40~85°C RoHS Compliance
	BPF1608LM07R2400A / CFL4111515072454K 1608 2.4G BPF Type07	Freq. Range: 2400-2500 MHz Insertion Loss: 3.2 dB (Max.) VSWR * : 2.0 (Max)	Attenuation: 40dB Min @ 880~915 MHz 38dB Min @ 1710~1850 MHz 40dB Min @ 1850~1910 MHz 40dB Min @ 1920~1990 MHz 35dB Min @ 2110~2170 MHz 30dB Min @ 4800~5000 MHz 30dB Min @ 7200~7500 MHz	Size(mm): 1.6*0.8*0.6 Operating Temp.: -40~85°C RoHS Compliance

* VSWR depends on the environment

Filter (BPF)

Model	Part No./ Description	Electrical Data		Mechanical Data
	BPF1608LM17R2400A / CFL4111515172454K 1608 2.4G BPF Type17	Freq. Range: 2400-2500 MHz Insertion Loss: 2.7 dB (Max.) VSWR * : 2.0 (Max)	Attenuation: 38dB Min @ 880~915 MHz 35dB Min @ 1710~1850 MHz 35dB Min @ 1850~1910 MHz 35dB Min @ 1920~1990 MHz 25dB Min @ 2110~2170 MHz 30dB Min @ 4800~5000 MHz 30dB Min @ 7200~7500 MHz	Size(mm): 1.6*0.8*0.6 Operating Temp.: -40~85°C RoHS Compliance
	BPF1608LM11R2400A / CFL4111515112454K 1608 2.4G BPF Type11	Freq. Range: 2400-2500 MHz Insertion Loss: 1.8 dB (Max.) VSWR * : 2.0 (Max)	Attenuation: 20dB Min @ 1710~1990 MHz 6.5dB Min @ 2110~2170 MHz 25dB Min @ 4800~5000 MHz 20dB Min @ 7200~7500 MHz	Size(mm): 1.6*0.8*0.6 Operating Temp.: -40~85°C RoHS Compliance
	BPF1608LM37R2400A / CFL4111515372454K 1608 2.4G BPF Type37	Freq. Range: 2400-2500 MHz Insertion Loss: 2.8 dB (Max.) VSWR * : 2.0 (Max)	Attenuation: 38dB Min @ 880~915 MHz 35dB Min @ 1710~1850 MHz 35dB Min @ 1850~1910 MHz 35dB Min @ 1920~1990 MHz 30dB Min @ 2110~2170 MHz 35dB Min @ 4800~5000 MHz 25dB Min @ 7200~7500 MHz	Size(mm): 1.6*0.8*0.6 Operating Temp.: -40~85°C RoHS Compliance

Filter (LPF)

Model	Part No./ Description	Electrical Data		Mechanical Data
	LPF1608LL53R2400A / CFL4111715532454K 1608 2.4G LPF Type53	Freq. Range: 2400-2500 MHz Insertion Loss: 0.48dB (Max) VSWR * : 1.5 (Max)	Attenuation: 35dB Min @ 4800~5000 MHz 27dB Min @ 7200~7500 MHz	Size(mm): 1.6*0.8*0.65 Operating Temp.: -40~85°C RoHS Compliance

Filter (Diplexer)

Model	Part No./ Description	Electrical Data		Mechanical Data
	DPX2012LL85R2455A / CFL4111714852524K 2012 2.4/5GHz Diplexer Type85	Freq. Range: 2400-2500MHz/ 4900-5900MHz Insertion Loss: Low : 0.7dB/ High: 0.9dB VSWR * : 2.0 (Max)	Attenuation: 20dB Min @ 4900~5900 MHz 20dB Min @ 2400~2500 MHz	Size(mm): 2.0*1.2*0.85 Operating Temp.: -40~85°C RoHS Compliance
	DPX2012LL89R2455A / CFL4111714892524K 2012 2.4/5GHz Diplexer Type89	Freq. Range: 2400-2500MHz/ 4900-5950MHz Insertion Loss: Low : 0.5dB/ High: 0.65dB VSWR * : 2.0 (Max)	Attenuation: 20dB Min.,2f0@4800~5000 MHz 20dB Min.,3f0@7200~7500 MHz 20dB Min. @ 824~915 MHz 20dB Min. @1800~2500 MHz 10dB Ref.,2f0@9800~11900 MHz	Size(mm): 2.0*1.2*0.5 Operating Temp.: -40~85°C RoHS Compliance

* VSWR depends on the environment



Balun				
Model	Part No./ Description	Electrical Data		Mechanical Data
	BLN1608LL01R5000A/ CBA4711715015004K 1608 5G Balun Type01, 50100	Freq. Range: 4900-5950MHz Insertion Loss: 1.2 dB (Max) VSWR : 2.0 (Max)	Unbalanced Impedance: 50Ω Balanced Impedance: 100Ω Phase Difference: 180 ±10 degree Amplitude Difference: 1.5 dB (Max)	Size(mm): 1.6*0.8*0.65 Operating Temp.: -40~85°C RoHS Compliance
	BLN1608LL00R2400A/ CBA4711715002454K 1608 2.4G Balun Type00, 5050	Freq. Range: 2400-2500MHz Insertion Loss: 1.2 dB (Max) VSWR : 2.0 (Max)	Unbalanced Impedance: 50Ω Balanced Impedance: 50Ω Phase Difference: 180 ±10 degree Amplitude Difference: 1 dB (Max)	Size(mm): 1.6*0.8*0.65 Operating Temp.: -40~85°C RoHS Compliance
	BLN1608LL01R2400A/ CBA4711715012454K 1608 2.4G Balun Type01, 50100	Freq. Range: 2400-2500MHz Insertion Loss: 1.1 dB (Max) VSWR : 2.0 (Max)	Unbalanced Impedance: 50Ω Balanced Impedance: 100Ω Phase Difference: 180 ±10 degree Amplitude Difference: 2 dB (Max)	Size(mm): 1.6*0.8*0.65 Operating Temp.: -40~85°C RoHS Compliance
Balance Filter (Combo)				
Model	Part No./ Description	Electrical Data		Mechanical Data
	BLF2012LL98R2400A/ CBA4711714982454K 2012 2.4G Combo Type98	Freq. Range: 2400-2500MHz Insertion Loss: 3.5dB (Max) VSWR : 2.0 (Max) Unbalanced Impedance: 50Ω Balanced Impedance: Conjugate match to CSR BC03/04 series Phase Difference: 180 ±5 degree @25°C Amplitude Balance: 1.0 dB (Max)	Attenuation: 40dB Min@880~960MHz 25dB Min@1300~1600MHz 35dB Min@4800~5000MHz 30dB Min@7200~7500MHz	Size(mm): 2.0*1.2*0.9 Operating Temp.: -40~85°C RoHS Compliance
	BLF2012LM37R2400A/ CBA4711514372454K 2012 2.4G Combo Type37	Freq. Range: 2400-2500MHz Insertion Loss: 2.8 dB (Max) VSWR : 2.0 (Max) Unbalanced Impedance: 50Ω Balanced Impedance: Conjugate match to CSR BC04/05/06 series Phase Difference: 180 ±10 degree @25°C Amplitude Balance: 1.5 dB (Max)	Attenuation: 35dB Min@880~960MHz 30dB Min@1710~1880MHz 20dB Min@1880~1990MHz 30dB Min@4800~5000MHz	Size(mm): 2.0*1.2*0.8 Operating Temp.: -40~85°C RoHS Compliance
	BLF2012LM31R2400A/ CBA4711514312454K 2012 2.4G Combo Type31	Freq. Range: 2400-2500MHz Insertion Loss: 3.1 dB (Max) VSWR : Unbalanced Impedance: 50Ω Balanced Impedance: Conjugate match to MTK MT6616 series Phase Difference: 180 ±10 degree @25°C Amplitude Balance: 1.5 dB (Max)	Attenuation: 35dB Min@880~960MHz 30dB Min@1710~1880MHz 20dB Min@1880~1990MHz 30dB Min@4800~5000MHz	Size(mm): 2.0*1.2*0.8 Operating Temp.: -40~85°C RoHS Compliance

* VSWR depends on the environment

Explanation of ordering code - New

Ordering example : **ANT3216A063R2400A****Product Type (code 1)**

ANT: Antenna
 BPF: Band-Pass Filter
 LPF: Low-Pass Filter
 BLN: Balun
 BLF: Balun Filter
 DPX: Diplexer

(1) Size (mm) - SMD (LTCC) (code 2)

3216: 3.2 x 1.6 mm
 2012: 2.0 x 1.2 mm
 2520: 2.5 x 2.0 mm

**(2) Connector - Cable length (mm)
Stand-alone (code 2)**

Ex: X100 – IPEX connector, 100 mm cable length
 X: IPEX, M: MMCX, S: SMA, Z: Stripped
 100: 100 mm cable length

Type (code 3)

L, F, A: Chip antenna / Filter / Balun
 B: Bulk antenna
 P: PCB
 X: FPCB
 S: Metal
 E: External
 J: Integrated antenna

**Factory Control Code /
Cable Type (code 7)****Frequency Band (MHz)(code 6)**

2400: 2.4 – 2.5 GHz;
 2455: 2.4&5 GHz
 1575: GPS; 1516: GPS+Glonass
 0433: 433 MHz
 0870: 868 MHz
 0918: 900/1800 MHz
 WQUD: 850/900/1800/1900 MHz
 WPEN: 850/900/1800/1900/2100 MHz

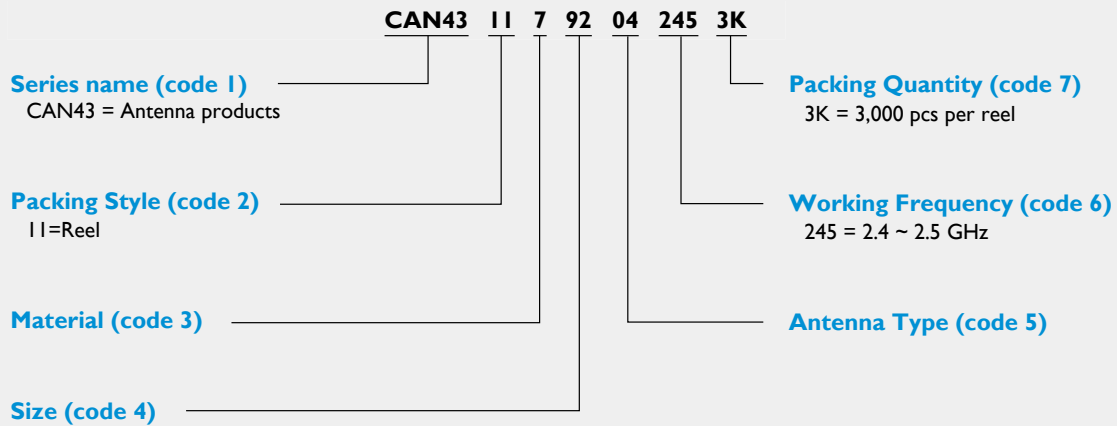
Packing Style (code 5)

R: Tape & Reel
 T: Tray
 B: Bulk

Serial No. (code 4)

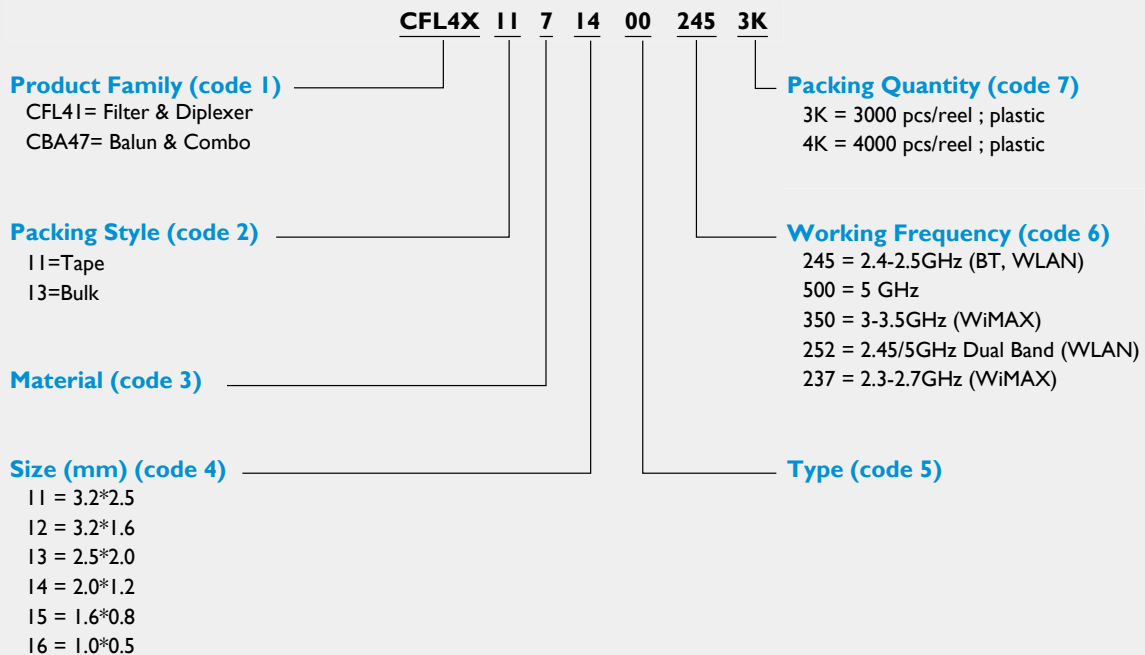
Explanation of ordering code - Antenna (old)

Ordering example : **CAN4311792042453K**



Explanation of ordering code - Filter / Diplexer / Balun / Combo (old)

Ordering example : **CFL4X11714002453K**



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