

Low Power RF Products



RF Product Technology for a Wireless Age



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The table below identifies the various Murata products listed in this brochure, which are suitable for use in some of the most popular RF applications. For other applications, please contact Anglia.

	RF APPLICATION									
Murata Series	DAB	WiFi	Bluetooth	ZigBee	Short Range	RFID	RKE	GPS	Cellular	WLAN
Frequency Sources										
CSBLA					 V 	 ✓ 	~			
CSBFB					~	~	~			
CSTC					~	~	~			
CSTLS					~	~	~			
SARCC					~		~			
MQK, MQL, MQR, MQW5		~	~	v		~		~	v	~
Capacitors	_					•	•	•		
GRM	~	 ✓ 	~	~	~	~	~	~	 ✓ 	~
GJM	~	v	 ✓ 	~	~	~	~	~	~	 ✓
TZ		~	 ✓ 	~	~	~	~			
Inductors MSA1	1								1	
LOW	~	~	~	~			~	~	~	~
LQW	~	~	V V	~	~			~	~	~
LQG		~	V V	V V	~	~	~	~	~	~
BLM	~	~	· ·	~	~				~	
Filters IF										
SFECS					 ✓ 	 ✓ 				
SFECF					~	~	~			
SFSCE					V	V				
SFPKA					~					
CFUK					~					
CFUL					v					
CFWKA					~					
CFWL					~					
MKFCC						~				
SAFJ	~	v	 ✓ 	~						~
SAFC					~		~	~		
SAFD								~		
SAFCD		~	 ✓ 	~						~
LFB32_SH LFB32_SQ										
Discrimimators										
CDBL						~	 ✓ 			
CDBK						~	~			
CDSCB							~			
					~					
					~					
Filters RF LFB SG		~	~	~	~		~	~		~
Filters RF		✓ ✓	✓ ✓ ✓	v v	<i>·</i>	V	-	~		~ ~
Filters RF LFB_SG						~ ~	-	v		
Filters RF LFB_SG LFL LFH LFE		> > >	✓✓✓✓	ン ン ン			-			~
Filters RF LFB_SG LFL LFH LFE SAF		<i>></i> <i>></i>	✓ ✓	ン ン			-	✓ ✓		~
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Filters RF LFB_SG LFL LFH LFE SAF SAF SAW		> > > > > >		ン ン ン ン			-			<i>V</i> <i>V</i>
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Filters RF LFB_SG LFL LFH LFE SAF SAF SAF SAW DFCH DFCB LFD		>>>> >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	V V V V	マ マ マ マ マ マ マ マ マ マ マ マ マ マ マ マ マ マ マ			-	V V		<i>v</i> <i>v</i>
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Filters RF LFB_SG LFL LFL LFE SAF SAF SAW DFCH DFCB LFD LMTP RF Output Components		> > > > > >		V V V V V V V V V V V V			-	V V	· · · · · · · · · · · · · · · · · · ·	
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Filters RF LFB_SG LFL LFL LFE SAF SAF SAW DFCH DFCH DFCB LFD LMTP RF Output Components DFYH		> > > > > >		V V V V V V V V V V V V			-	V V	~ ~ ~ ~	
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Filters RF LFB_SG LFL LFL LFE SAF SAF SAW DFCH DFCB LFD LMTP RF Output Components DFYH SAY CEG CES							-	V V	V V V V	V V V V V V V V V V V V V V V V V V V V
Filters RF LFB_SG LFL LFL LFH LFE SAF SAF SAW DFCH DFCB LFD LMTP RF Output Components DFYH SAY CEG CES LDC LDD LDD LDB							-	V V	V V V V	V V V V V V V V V V V V V V V V V V V V
Filters RF LFB_SG LFL LFL LFE SAF SAF SAW DFCH DFCH DFCB LFD LMTP RF Output Components DFYH SAY CEG CES LDC LDD							-	V V		
Filters RF LFB_SG LFL LFL LFH LFE SAF SAF SAW DFCH DFCB LFD LMTP RF Output Components DFYH SAY CEG CES LDC LDD LDD LDB							-	<i>v v v v</i>		
Filters RF LFB_SG LFL LFL LFE SAF SAF SAW DFCH DFCB LFD LMTP RF Output Components DFYH SAY CEG CES LDC LDD LDB LMSW LMSP MM							-	<i>v v v v</i>		
Filters RF LFB_SG LFL LFL LFE SAF SAF SAW DFCH DFCH DFCB LFD LMTP RF Output Components DFYH SAY CEG CES LDC LDD LDB LMSW LMSP MM MX							-	· · · · · · · · · · · · · · · · · · ·		
Filters RF LFB_SG LFL LFL LFE SAF SAF SAF SAW DFCH DFCB LFD LMTP RF Output Components DFYH SAY CEG CES LDC LDD LDB LMSW LMSP MM MX MM8430							-	V V V V V V V V		
Filters RF LFB_SG LFL LFL LFE SAF SAF SAW DFCH DFCB LFD LMTP RF Output Components DFYH SAY CEG CES LDC LDD LDB LMSP MM MX MM8430 MM8130							-	· · · · · · · · · · · · · · · · · · ·		
Filters RF LFB_SG LFL LFL LFH LFE SAF SAF SAW DFCH DFCB LMTP RF Output Components DFYH SAY CEG CES LDC LDD LDB LMSW LMSP MM MX MM8430 MM8130 Chip Antennas							-	V V V V V V V V		
Filters RF LFB_SG LFL LFL LFE SAF SAF SAW DFCH DFCB LFD LMTP RF Output Components DFYH SAY CEG CES LDC LDD LDB LMSP MM MX MM8430 MM8130							-	V V V V V V V V		



Murata is recognised worldwide as an 'Innovator in Electronics'. Their extensive product range includes a wide variety of components and modules that are ideally suited for low power RF applications, delivering miniaturisation and improved performance. These have been conveniently listed in this brochure under eight function headings, together with a handy selection guide identifying suitable Murata products by application.



Frequency Sources

Capacitors

Product Type	Function	Range	Through Hole	SMT	Murata Series
	Fundamental Frequency	375 to 1250kHz	~		CSBLA
Ceramic Resonators (CERALOCK [®])		430 to 1250kHz		~	CSBFB
Ceramic Resonators (CERALOCR ⁺)		2 to 70MHz		~	CSTC
		3.4 to 70MHz	~		CSTLS
SAW Resonators	Final Frequency	304 to 868MHz		~	SARCC
VCO's	Final Frequency Microwave	700 to 3600MHz		~	MQK, MQL, MQR, MQW5



Through **Product Type** Function Range SMT **Murata Series** Hole ~ 0.3pF to 100µF GRM Ceramic Capacitors Size 0201 to 2220 **General Purpose** Hi-O Ceramic Capacitors Size 0201, 0402 High Frequency Low Loss 0.1 to 18pF ~ GJM **Trimmer Capacitors** Tuning 0.4 to 120pF ~ ΤZ ~

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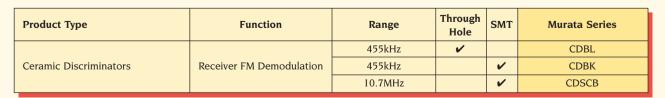
Product Type	Function	Range	SMT	Murata Series
Antenna Coils	Receiver Front End	2.8mH	~	MSA1
Hi-Q Wirewound Air Core	VHF, UHF, SHF	1.1 to 470nH	~	LQW
Tight Tolerance Low Resistance Thin Film	DC & Data Lines	0.6 to 100nH	~	LQP
Multilayer	Resonant Circuits	1.0 to 270nH	~	LQG
Chip Ferrite Bead High Impedance	DC & Data Lines	5 Ω to 2.7k Ω	~	BLM

Filters IF



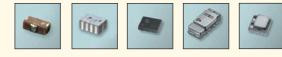
Product Type	Function	Range	Through Hole	SMT	Murata Series
Ceramic Filters 2 Element	Receiver IF	10.8MHz		~	SFECS
Cerainic Filters 2 Element	Receiver II	10.7MHz		~	SFECF
Ceramic Filters 2 Element Metal Can	Receiver IF	10.7MHz		~	SFSCE
		450, 455kHz		~	SFPKA
Ceramic Filters 4 Element	Receiver IF	455kHz		~	CFUK
		455kHz	~		CFUL
Ceramic Filters 6 Element	Receiver IF	450kHz		~	CFWKA
Cerainic Filters o Element		450, 455kHz	~		CFWL
BGS Filter	Receiver IF	40.0MHz		~	MKFCC
	Receiver IF	43.0MHz		~	SAFJ
SAW Filters		85.38, 110.592, 130.38MHz		~	SAFC
SAW FIIters		243.95, 265.55MHz		~	SAFD
		450.0, 570.0MHz		~	SAFCD
Chip LC Filters Balance-Balance	Receiver IF	130.38, 166.85MHz		~	LFB32_SH
Chip LC Filters Balance-Unbalance	Receiver IF	130.38, 166.85MHz		~	LFB32_SQ

Discriminators



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Filters RF



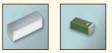
Product Type	Function	Range	SMT	Murata Series
Chip Multilayer LC Filters Band Pass	Receiver Front End	1489.0 to 5787.5MHz	~	LFB_SG
Chip Multilayer LC Filters Low Pass	Receiver Front End	600.0 to 5787.5MHz	~	LFL
Chip Multilayer LC Filters High Pass	Receiver Front End	942.5MHz	~	LFH
Chip Multilayer LC Filters (Trap)	Receiver Front End	560.0MHz	~	LFE
SAW Filters for GPS	Receiver Front End	1575.42, 1575.5MHz	~	SAF
SAW Filters for GSM	Receiver Front End	850, 900, 1800, 1900MHz bands	~	SAF
SAW Filters Dual Band GSM	Receiver Front End	850, 900, 1800, 1900MHz bands	~	SAW
Dielectric Filters (GIGAFIL)	Receiver Front End	800 to 900MHz, 1.5 to 2.5GHz	~	DFCH
Dielectric Filters (GIGAFIL)	Receiver Front End	1.5 to 2.5GHz	~	DFCB
Chip Multilayer Diplexers	Receiver Front End	2450/5250, 5375, 5487.5MHz	~	LFD
Triplexer with Integrated SAW Filter	Receiver Front End	859.0, 1575.5, 1920.0MHz	~	LMTP

RF Output Components



Product Type	Function	Range	SMT	Murata Series
Dielectric Duplexers (GIGAFIL®)	Antenna, TX, RX Link	800 to 900MHz, 1.5 to 2.5GHz	~	DFYH
SAW Duplexers	Antenna, TX, RX Link	836.5 to 1950.0MHz	~	SAY
Indatana	There are it to a	835.0 to 911.5MHz	~	CEG
Isolators	Transmitter	836.5 to 1950MHz	~	CES
Chip Multilayer Hybrid Couplers	Transmitter	836.5 to 2450.0MHz	~	LDC
Chip Multilayer Hybrid Dividers	Transmitter	713.0 to 2140.0MHz	~	LDD
Chip Multilayer Hybrid Baluns	Transmitter	836.5 to 5512.0MHz	~	LDB
RF Diode Switches	TX/RX Changeover	5790.0 to 5810.0MHz	~	LMSW
RF Diode Switches Dual Band GSM	TX/RX Changeover	900/1800MHz bands	~	LMSP
			~	ММ
Coaxial Connectors	Antenna Connection	DC to 3GHz or 6GHz	~	МХ
Convial Compositors with Switches	Test Ducks Courseties		~	MM8430
Coaxial Connectors with Switches	Test Probe Connection	DC to 6GHz	~	MM8130





Product Type	Function	Range	SMT	Murata Series
Chip Dielectric Antennas	Antenna	1575.0 to 2450.0MHz	~	ANC
Chip Multilayer Antennas	Antenna	2650.0 to 7800.0MHz	~	LDA

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Recognised as an 'Innovator in Electronics', Murata is renowned for its skills in ceramic technology and developing components for demanding applications.

From its days when Murata specialised in ceramic capacitors, the company has long since diversified into many other product areas ranging from resistors, thermistors, coils, EMI suppression filters, resonators and piezo electric sounders through to microwave filters & modules, sensors, optical products and power supplies.

Dedicated to providing the market with high quality products, Murata's rigorous design rules and extensive pre-release testing ensure total quality from day one. The company is fully RoHS compliant, ISO/TS certified around the world and its leading technologies in place to support the next generation of electronic equipment.

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Anglia is the largest privately owned electronic component distributor in the UK and supplies a very wide range of semiconductors, opto-electronics and interconnect products together with passive and electro-mechanical components.

Awarded the prestigious 'RoHS Trusted' Kitemark, Anglia supports OEM and EMS companies in every sector of electronics manufacturing. It aims to streamline logistics and reduce customers' transaction costs through services that include KAN-BAN, EDI, and customer-dedicated inventory culminating in accurate, on-time delivery.

Technical support spans a sampling service, telephone advice from product specialists and on-site visits from field applications engineers. An in-house design team adds expert resources, helps reduce final product costs and accelerates development times.

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For further information, technical data or application advice on any of the Murata products please contact Anglia

By telephone: +44 (0)1945 47 47 47

By email: murata@anglia.com

or visit the Murata section of our website at: www.anglia.com/murata