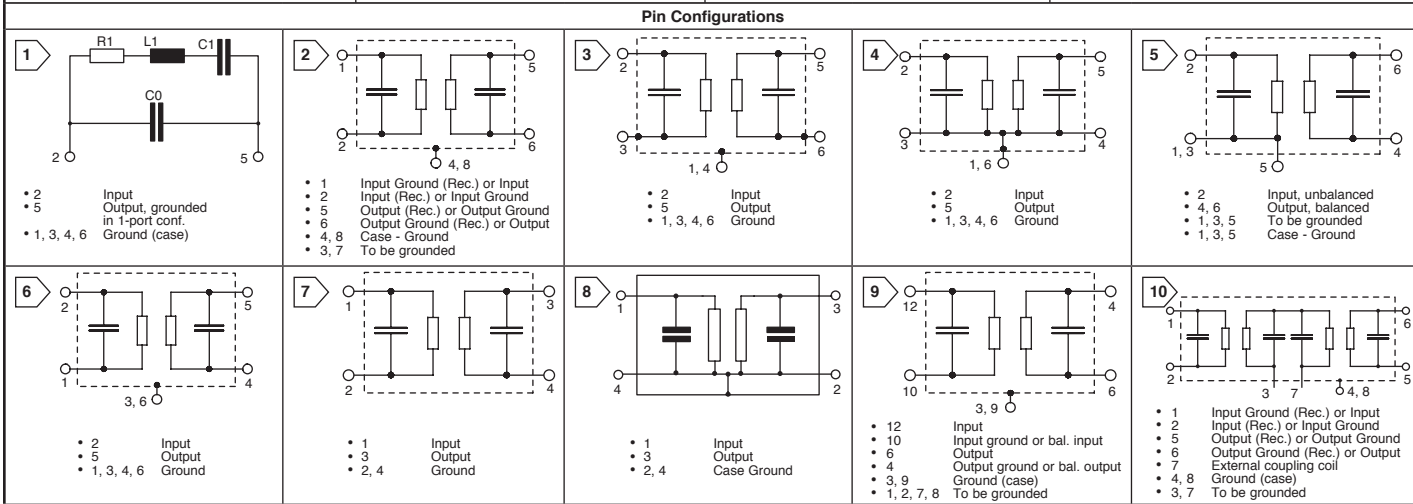
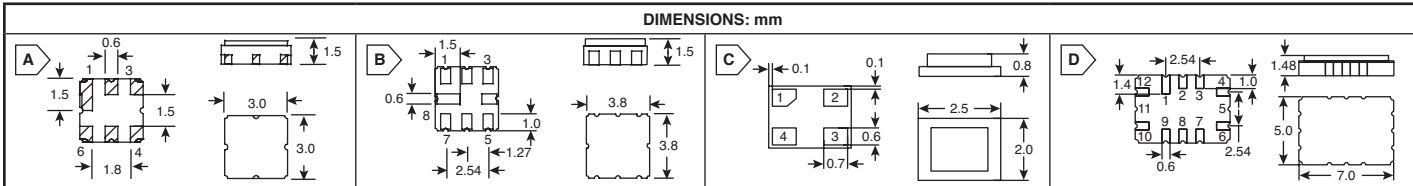


EPCOS SAW Components and Filters

RoHS Compliant This product is RoHS compliant.

EPCOS



Frequency Control Epcos

Surface Acoustic Wave (SAW) resonators and front end filters are key components in modern Remote Control Applications, which transmit in Europe typically at 433.92MHz or 868-870MHz and in the USA at 315 or 915MHz. These remote controls are used in systems for Remote Keyless Entry (RKE, wireless operation of a car's central locking system), wireless Tire Pressure Monitoring (TPMS), electronic toll, RFID, short range data transmission, security alarms and garage door openers. They consist of several transmitters and receivers as well as the combination of both, transceivers.

Transmitter The code which is supposed to be transmitted to the receiver consists of an encoded identifier (including a rolling code for security reasons) and the message itself to e.g. unlock the central locking system of a car. An oscillator which is synchronized by a SAW resonator oscillates at an exact frequency. Thereby, it generates an RF carrier signal, which (using the simple on-off-keying procedure, OOK) is modulated according to the transmission code by simply turning the oscillator on and off. This coded, modulated RF signal will be sent out through the antenna of the transmitter.

Receiver The modulated RF signal (encoded message) sent from the transmitter is received by the antenna of the receiver a few feet away (typically 30-300 ft.). Additionally, the receiver will involuntarily pick up environmental noise and spurious emissions which may jam/block the receiver, making it deaf for any message from the transmitter. To avoid this, a narrow band SAW front end filter with high selectivity can filter out this unwanted noise. A local oscillator (stabilized e.g. by a SAW resonator like the transmitter oscillator) generates an LO frequency, typically 500KHz or 10.7MHz below transmission frequency. The filtered RF signal from the antenna will now be mixed down in a mixer with this LO frequency to an intermediate frequency (IF), which can be decoded by decoder ICs and microcontrollers.

Features:

- Provides reliable, fundamental mode, quartz frequency stabilization in transmitters or local oscillators
- RoHS compatible
- Ni, gold-plated terminals
- Passivation layer elpas
- AEC-Q200 qualified

SAW COMPONENTS

PRODUCT NEW

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Epcos Part No.	Application	Center Frequency (MHz)	Case Size (mm)	Min. Insertion Attenuation (dB)	Price Each			
						1	50	100	1000
Signal Conditioning									
871-B39162B7829C710	B39162B7829C710	Low-loss Filter for GPS receiver	1575.42	2.0 x 1.4 x 0.68	1.2	1.25	.83	.76	.586
871-B39182B4142U410	B39182B4142U410	Low-loss Filter for Mobile Communication	1842.50	3.0 x 3.0 x 1.1	3	3.73	3.37	2.81	2.17
871-B39182B9019E610	B39182B9019E610	Low-loss Filter for Mobile Communication	1842.50	2.0 x 1.4 x 0.68	1.9	1.24	.83	.757	.588
871-B39311B3768Z810	B39311B3768Z810	Low-loss Filter for RC Receivers	313.85	3.8 x 3.8 x 1.5	1.9	2.61	2.35	1.96	1.56
871-B39321B3576U310	B39321B3576U310	Low-loss Filter for RC Receivers	315.00	5.0 x 5.0 x 1.35	3.3	2.91	2.68	2.43	1.62
871-B39431B3555U310	B39431B3555U310	Low-loss Filter for RC Receivers	433.96	5.0 x 5.0 x 1.35	2.2	3.25	2.98	2.71	1.63
871-B39431B3557U310	B39431B3557U310	Low-loss Filter for RC Receivers	434.46	5.0 x 5.0 x 1.35	2	2.67	2.44	2.23	1.63
871-B39431B3580Z810	B39431B3580Z810	Low-loss Filter for RC Receivers	433.92	5.0 x 5.0 x 1.35	2.8	2.35	2.15	1.96	1.43
871-B39431B3733H110	B39431B3733H110	Low-loss Filter for RC Receivers	434.42	3.0 x 3.0 x 1.0	2.1	1.71	1.54	1.28	1.02
871-B39431B3757U310	B39431B3757U310	Low-loss Filter for RC Receivers	434.42	5.0 x 5.0 x 1.35	2	2.55	2.45	2.13	1.42
871-B39871B3571U310	B39871B3571U310	Low-loss Filter for RC Receivers	868.69	5.0 x 5.0 x 1.35	3.1	3.48	3.20	2.90	1.62
871-B39871B3574U310	B39871B3574U310	Low-loss Filter for RC Receivers	868.30	5.0 x 5.0 x 1.35	4.2	2.10	1.92	1.75	1.66
871-B39871B3717U410	B39871B3717U410	Low-loss Filter for RC Receivers	866.50	3.0 x 3.0 x 1.1	2.1	1.54	1.38	1.28	.96
871-B39871B3725U410	B39871B3725U410	Low-loss Filter for RC Receivers	869.00	3.0 x 3.0 x 1.1	2.5	1.70	1.57	1.43	1.07
871-B39871B3744H110	B39871B3744H110	Low-loss Filter for RC Receivers	868.30	3.0 x 3.0 x 1.0	3	1.70	1.57	1.43	1.07
871-B39871R2709U310	B39871R2709U310	Transmitter stability	868.30	5.0 x 5.0 x 1.35	7	1.82	1.67	1.52	1.10
871-B39921B3726U410	B39921B3726U410	Low-loss RF Filter	915.00	3.0 x 3.0 x 1.1	2.6	1.15	1.05	.965	.71
871-B39921B3728U410	B39921B3728U410	Low-loss Filter for RC Receivers	915.00	3.0 x 3.0 x 1.1	2.2	1.15	1.05	.965	.71
871-B39921B4637Z610	B39921B4637Z610	Low-loss Filter for Mobile Communication	915.00	3.8 x 3.8 x 1.5	2.5	4.11	3.71	3.09	2.39
871-B69812N1577B403	B69812N1577B403	GPS Filter	1575.00	3.9 x 5.1 x 1.9	0.8	1.82	1.21	1.10	.85
871-B69842N5257A200	B69842N5257A200	WLAN 5GHz	5250.00	3.0 x 2.4 x 1.6	1.4	2.52	1.94	1.76	1.47

SAW FILTERS

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Epcos Part No.	Application	Internal Schematic Diagrams	Center Frequency	Case Size (mm)	Min. Insertion Attenuation (dB)	Price Each				Reel Qty.	Price Per Piece
							1	50	100	1000		
871-B39321B3741H110	B39321B3741H110	Keyless Entry, Short Range RF	A1	315	3.0x3.0x1.0	1.9	1.04	.96	.88	.66	9000	.55
871-B39431R960H110	B39431R960H110	ISM Band & Keyless Entry	A1	433.92	3.0x3.0x1.0	1.3	1.71	1.53	1.28	.99	9000	.70
871-B39431B3760Z810	B39431B3760Z810	ISM Band & Keyless Entry	B2	433.92	3.8x3.8x1.5	1.9	2.35	2.15	1.96	1.44	3000	1.30
871-B39431B3710U410	B39431B3710U410	Short Range Devices	A3	433.92	3.0x3.0x1.1	2.0	1.15	1.05	.965	.71	9000	.571
871-B39921B3718U410	B39921B3718U410	Short Range Devices	A4	916	3.0x3.0x1.1	2.4	1.54	1.38	1.28	.96	9000	.80
871-B39162B3520U410	B39162B3520U410	Automotive RF	A4	1575.42	3.0x3.0x1.1	1.3	1.38	1.26	1.15	.88	9000	.716
871-B39192B4143U410	B39192B4143U410	Short Range Devices	A4	1880	3.0x3.0x1.1	3.2	2.98	1.98	1.80	1.39	9000	1.15
871-B39202B4150U410	B39202B4150U410	Mobile Telephone PCS	A4	1960	3.0x3.0x1.1	2.8	4.54	3.02	2.74	2.12	9000	1.76
871-B39431B3750U310	B39431B3750U310	Short Range Devices	A3	433.92	3.0x3.0x1.1	2.0	2.55	2.34	2.13	1.57	3000	1.42
871-B39921B3588U410	B39921B3588U410	Short Range Devices	A4	915	3.0x3.0x1.1	2.9	1.04	.96	.88	.66	9000	.55
871-B39162B4031Z810	B39162B4031Z810	GPS	A5	1575.42	3.0x3.0x1.1	3.3	6.97	4.65	4.22	3.27	3000	3.07
871-B39401B3742H110	B39401B3742H110	Short Range Devices	A6	400	3.0x3.0x1.0	2.3	1.54	1.38	1.28	.96	9000	.80
871-B39431B3730H110	B39431B3730H110	Short Range Devices	A6	433.92	3.0x3.0x1.0	2.4	1.54	1.38	1.28	.96	9000	.80
871-B39321B3711U410	B39321B3711U410	Short Range Devices	A3	315	3.0x3.0x1.1	1.7	1.15	1.05	.965	.71	9000	.601
871-B39212B7750C810	B39212B7750C810	W-CDMA	C7	2140	2.5x2.0x0.8	2.6	1.80	1.47	1.35	1.23	9000	1.17
871-B39162B9080L310	B39162B9080L310	GPS	C8	1575.42	2.0x1.6x0.86	1.2	1.38	1.24	1.03	.742	9000	.66
871-B39111B4542H310	B39111B4542H310	Low Loss GPS	D9	110.59	2.0x1.6x0.86	12.2	5.05	3.80	3.50	3.36	3000	2.21
871-B39431B3780Z810	B39431B3780Z810	Short Range Devices	B2	433.92	3.8x3.8x1.5	2.0	2.55	2.34	2.13	1.57	3000	1.42
871-B39431B3790Z810	B39431B3790Z810	Short Range Devices	B10	433.92	3.8x3.8x1.5	3.6	2.55	2.34	2.13	1.57	3000	1.42
871-B39871B3762Z810	B39871B3762Z810	Short Range Devices	B2	868.3	3.8x3.8x1.5	3.1	2.55	2.34	2.13	1.57	3000	1.42
871-B39431B3760Z810	B39431B3760Z810	Short Range Devices	B2	433.92	3.8x3.8x1.5	1.9	2.35	2.15	1.96	1.44	3000	1.30