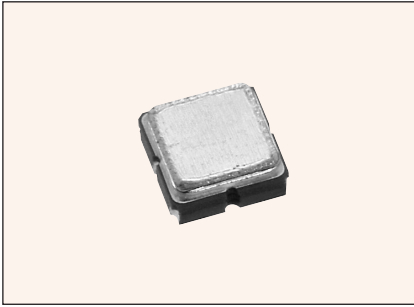


Surface Acoustic Wave Filter (SAW Filter)



TQS-915C-7R

Features

- Miniature size : 3.0(W) x 3.0(D) x 1.1(H)mm
- High selectivity

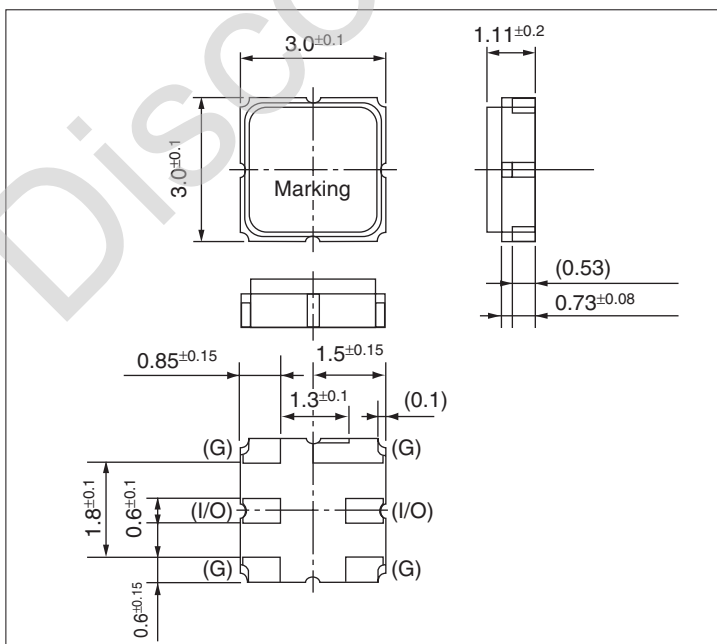
Application

- RF filter for Cellular Phone PCS system (Tx)

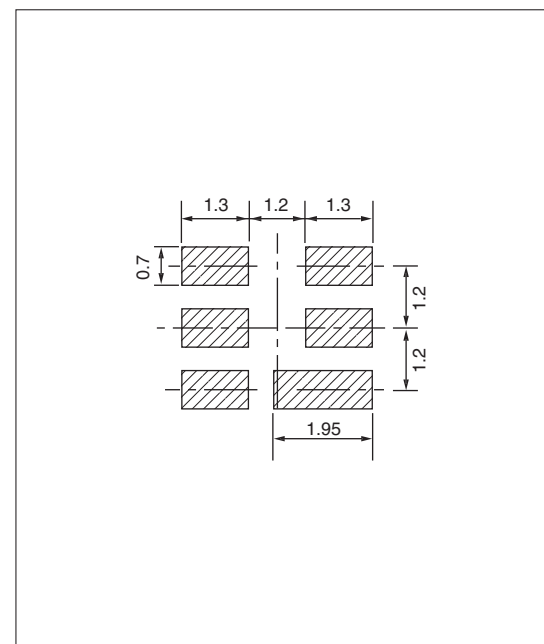
Specifications

Type	TQS-915C-7R
Nominal frequency	1880 MHz
Pass band	1850 to 1910 MHz
Insertion loss	4.1 dB max.
Pass band ripple	3.0 dB max.
VSWR	2.8 max.
Stop band attenuation (Referred to through Level)	
DC to 1500 MHz	21 dB min.
1500 to 1800 MHz	25 dB min.
1930 to 1960 MHz	5 dB min.
1960 to 1990 MHz	30 dB min.
1990 to 2200 MHz	26 dB min.
3700 to 3820 MHz	25 dB min.
5550 to 5730 MHz	15 dB min.
Terminating impedance	50 Ω
Operating temperature range	-30 °C to +85 °C

Package Outlines [Dimensions in mm]



Footprint [Dimensions in mm]

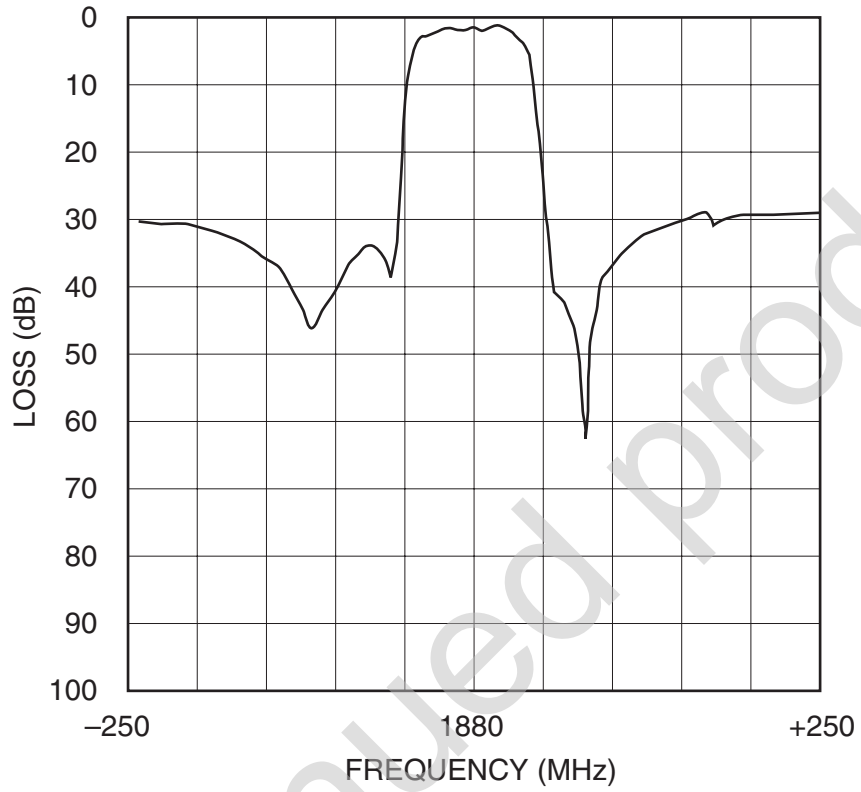


Surface Acoustic Wave Filter (SAW Filter)

RF Filter for Cellular Phone
 PCS system (Tx)

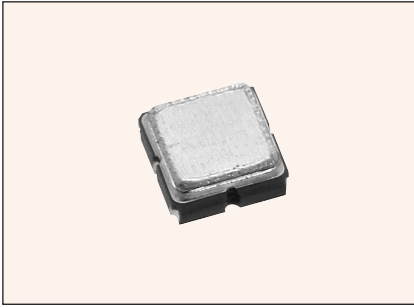
TQS-915C-7R
 1880 MHz

■ Electrical Data



Discontinued product

Surface Acoustic Wave Filter (SAW Filter)



TQS-916AA-7R

■ Features

- Miniature size : 3.0(W) x 3.0(D) x 1.1(H)mm
- High selectivity

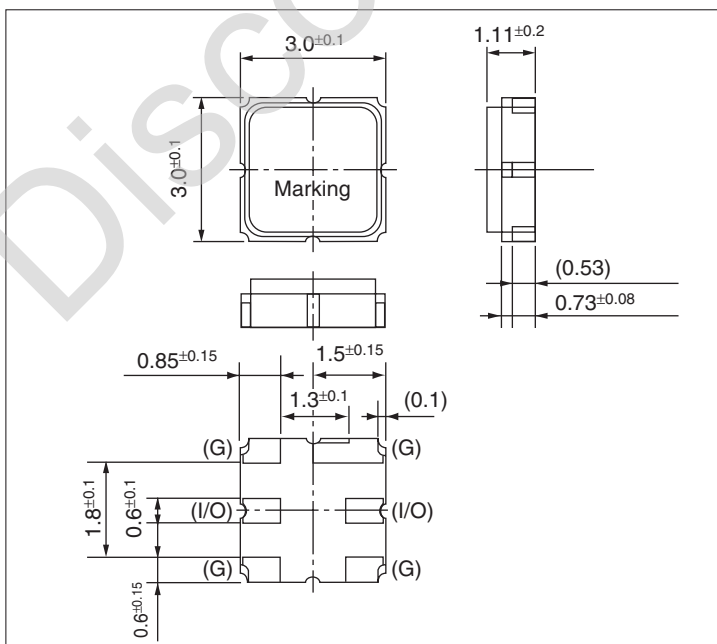
■ Application

- RF filter for Cellular Phone PCS system (Rx)

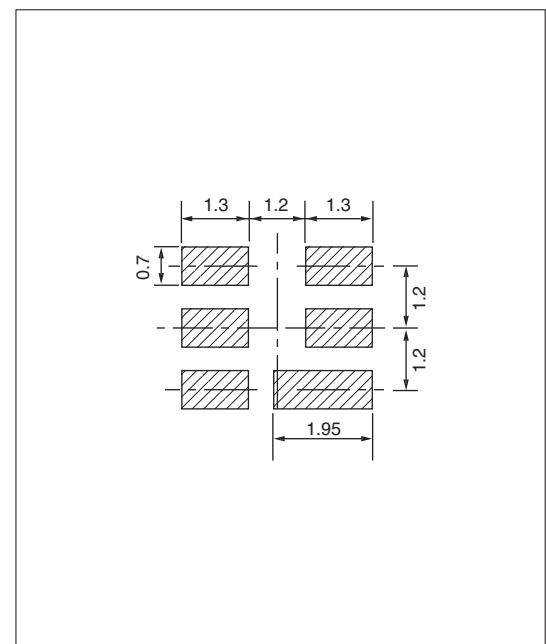
■ Specifications

Type	TQS-916AA-7R
Nominal frequency	1960 MHz
Pass band	1930 to 1990 MHz
Insertion loss	4.0 dB max.
Pass band ripple	3.0 dB max.
VSWR	2.5 max.
Stop band attenuation (Referred to through Level)	
DC to 1850 MHz	20 dB min.
1850 to 1895 MHz	28 dB min.
1895 to 1910 MHz	10 dB min.
2070 to 3000 MHz	22 dB min.
3000 to 4000 MHz	23 dB min.
4000 to 6000 MHz	15 dB min.
Terminating impedance	50 Ω
Operating temperature range	-30 °C to +85 °C

■ Package Outlines [Dimensions in mm]



■ Footprint [Dimensions in mm]

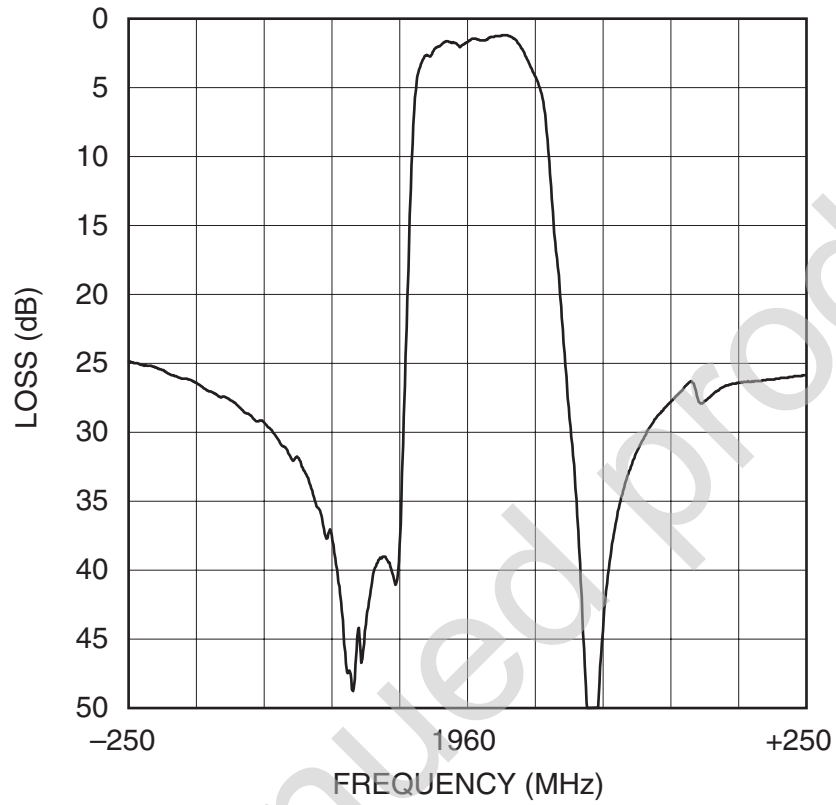


Surface Acoustic Wave Filter (SAW Filter)

RF Filter for Cellular Phone
 PCS system (Rx)

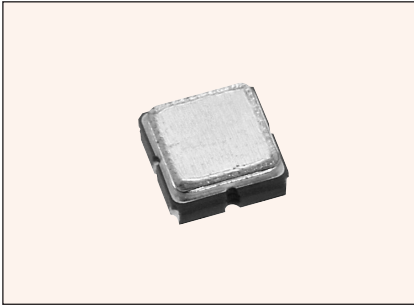
TQS-916AA-7R
 1960 MHz

■ Electrical Data



Discontinued product

Surface Acoustic Wave Filter (SAW Filter)



TQS-917A-7R

■ Features

- Miniature size : 3.0(W) x 3.0(D) x 1.1(H)mm
- High selectivity

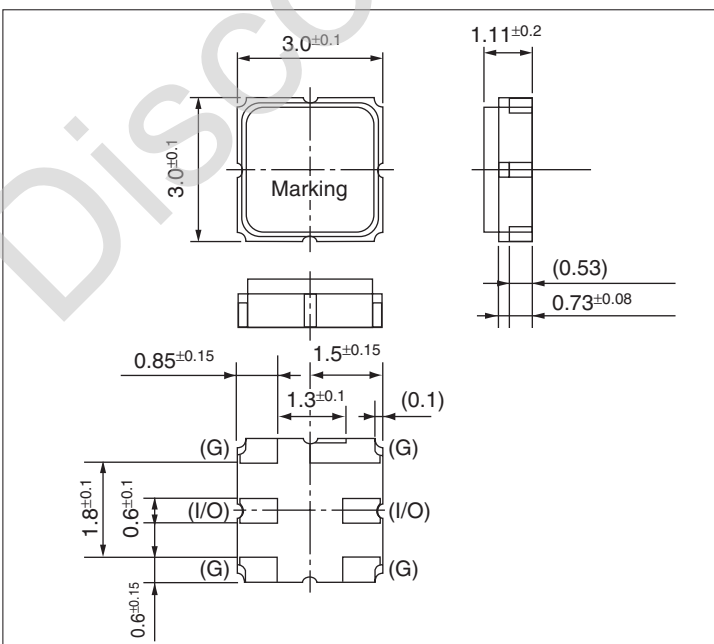
■ Application

- RF filter for Cellular Phone
AMPS / TDMA / CDMA system (Tx)

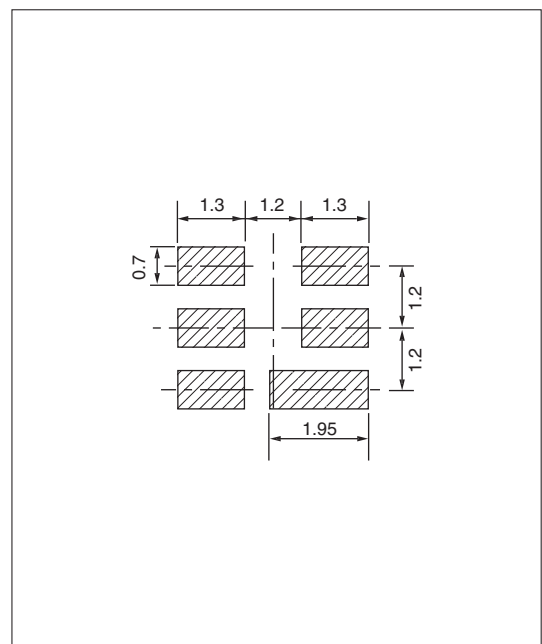
■ Specifications

Type	TQS-917A-7R
Nominal frequency	836.5 MHz
Pass band	824 to 849 MHz
Insertion loss	3.0 dB max.
Pass band ripple	2.0 dB max.
VSWR	2.0 max.
Stop band attenuation (Referred to through Level)	
DC to 800 MHz	24 dB min.
869 to 894 MHz	25 dB min.
894 to 1049 MHz	30 dB min.
1049 to 2000 MHz	20 dB min.
Terminating impedance	50 Ω
Operating temperature range	-30 °C to +85 °C

■ Package Outlines [Dimensions in mm]



■ Footprint [Dimensions in mm]

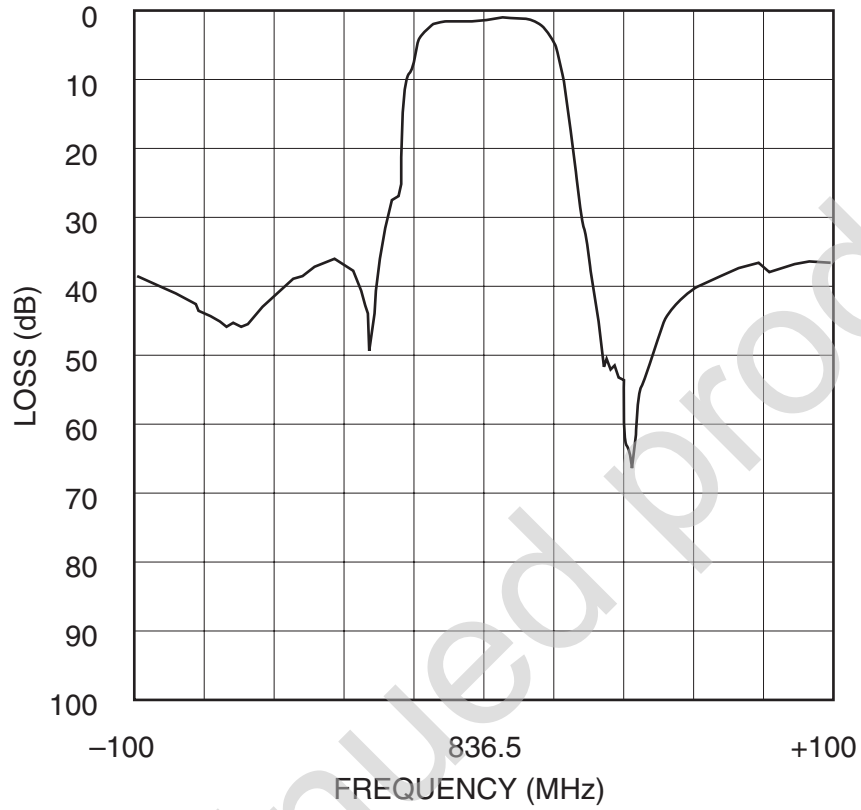


Surface Acoustic Wave Filter (SAW Filter)

RF Filter for Cellular Phone
 AMPS / TDMA / CDMA system (Tx)

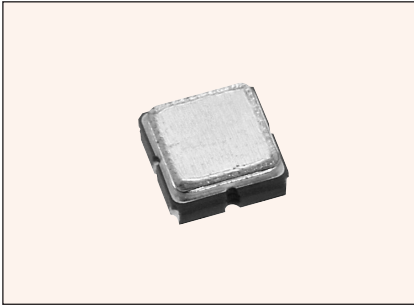
TQS-917A-7R
 836.5 MHz

■ Electrical Data



Discontinued product

Surface Acoustic Wave Filter (SAW Filter)



TQS-918A-7R

Features

- Miniature size : 3.0(W) x 3.0(D) x 1.1(H)mm
- High selectivity

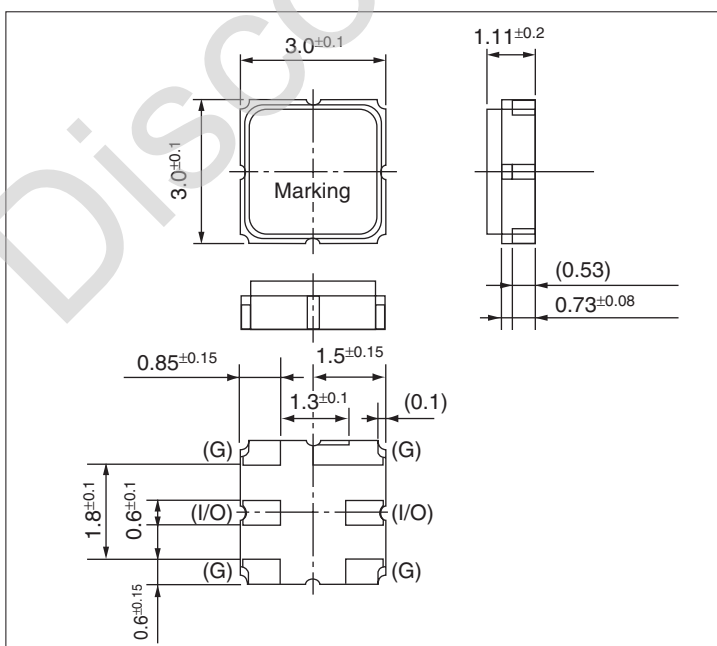
Application

- RF filter for Cellular Phone
AMPS / TDMA / CDMA system (Rx)

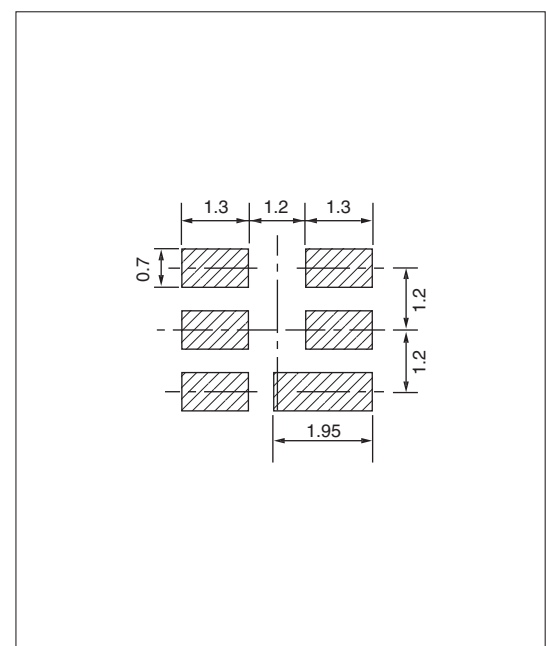
Specifications

Type	TQS-918A-7R
Nominal frequency	881.5 MHz
Pass band	869 to 894 MHz
Insertion loss	3.0 dB max.
Pass band ripple	2.0 dB max.
VSWR	2.0 max.
Stop band attenuation (Referred to through Level)	
DC to 779 MHz	24 dB min.
779 to 824 MHz	30 dB min.
824 to 849 MHz	30 dB min.
914 to 939 MHz	25 dB min.
939 to 2000 MHz	25 dB min.
Terminating impedance	50 Ω
Operating temperature range	-30 °C to +85 °C

Package Outlines [Dimensions in mm]



Footprint [Dimensions in mm]

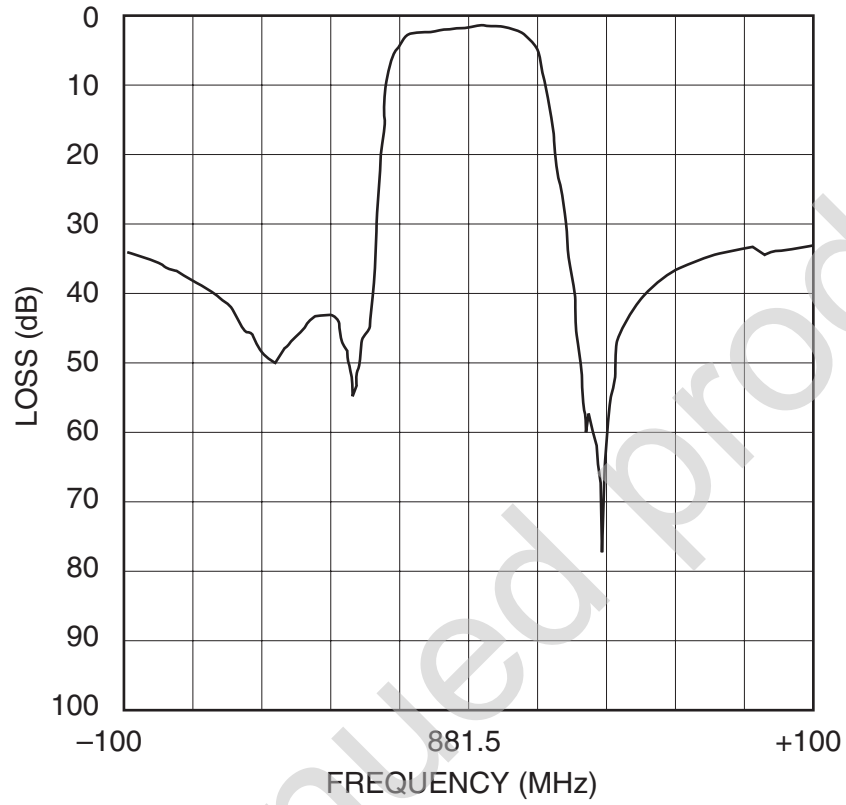


Surface Acoustic Wave Filter (SAW Filter)

RF Filter for Cellular Phone
 AMPS / TDMA / CDMA system (Rx)

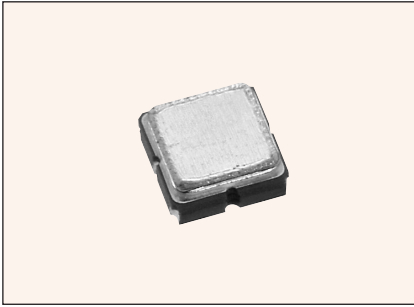
TQS-918A-7R
 881.5 MHz

■ Electrical Data



Discontinued product

Surface Acoustic Wave Filter (SAW Filter)



TQS-919A-7R

Features

- Miniature size : 3.0(W) x 3.0(D) x 1.1(H)mm
- High selectivity

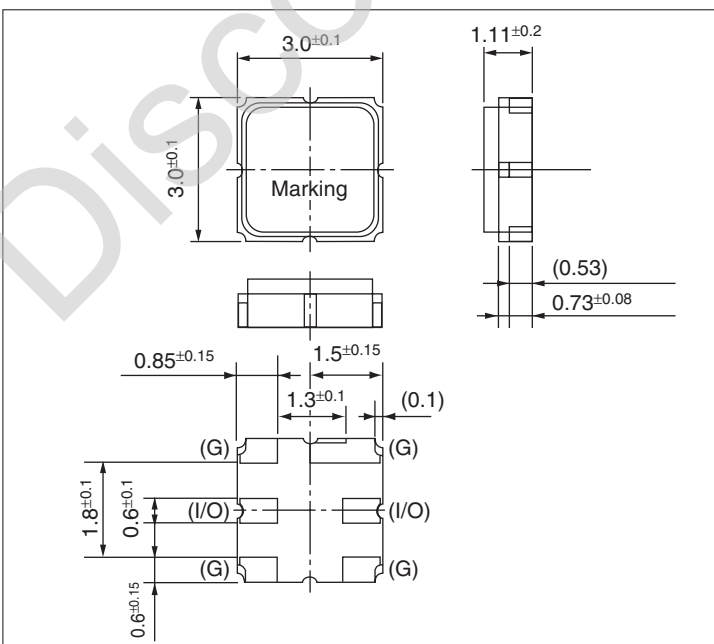
Application

- RF filter for Cellular Phone
KOREA - PCS system (Tx)

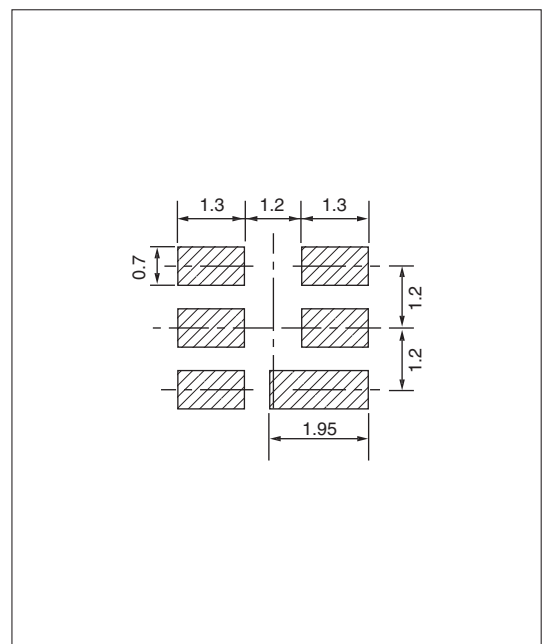
Specifications

Type	TQS-919A-7R
Nominal frequency	1765 MHz
Pass band	1750 to 1780 MHz
Insertion loss	3.0 dB max.
Pass band ripple	1.5 dB max.
VSWR	2.0 max.
Stop band attenuation (Referred to through Level)	
1350 to 1380 MHz	25 dB min.
1660 to 1690 MHz	30 dB min.
1840 to 1870 MHz	30 dB min.
2150 to 2180 MHz	30 dB min.
5220 to 5340 MHz	10 dB min.
Terminating impedance	50 Ω
Operating temperature range	-30 °C to +85 °C

Package Outlines [Dimensions in mm]



Footprint [Dimensions in mm]

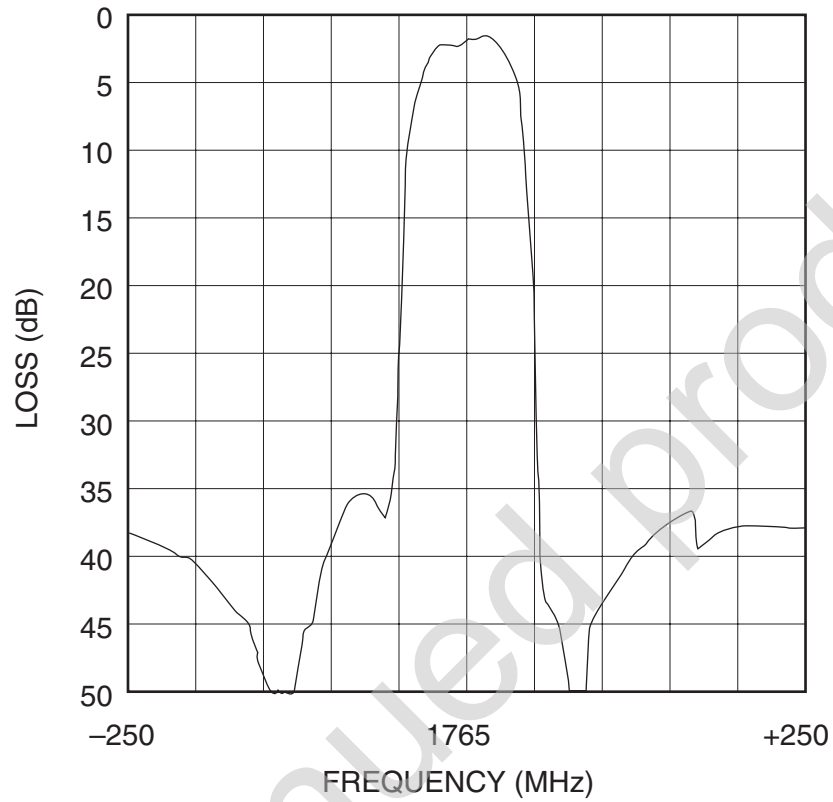


Surface Acoustic Wave Filter (SAW Filter)

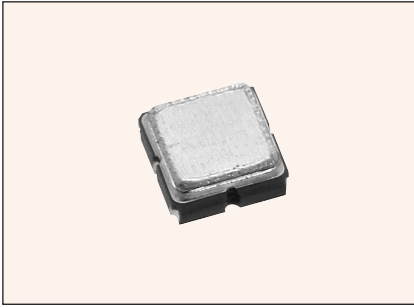
RF Filter for Cellular Phone
KOREA-PCS system (Tx)

TQS-919A-7R
1765 MHz

■ Electrical Data



Surface Acoustic Wave Filter (SAW Filter)



TQS-920A-7R

■ Features

- Miniature size : 3.0(W) x 3.0(D) x 1.1(H)mm
- High selectivity

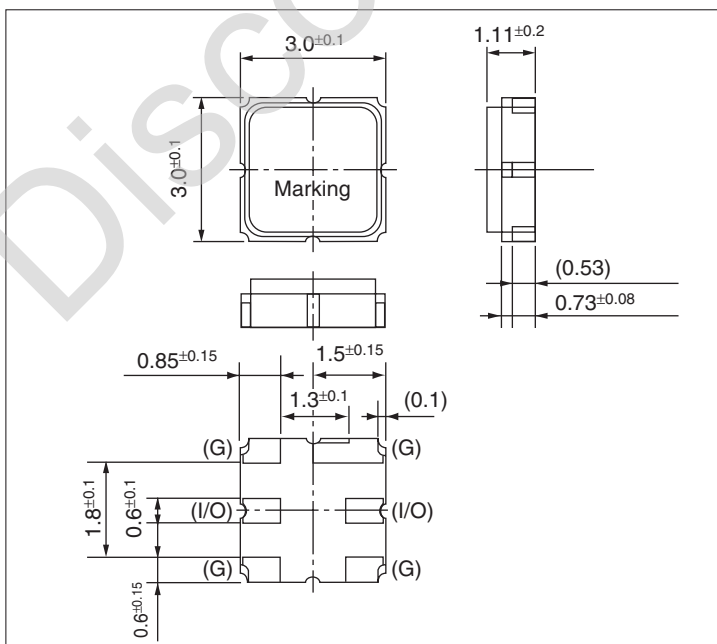
■ Application

- RF filter for Cellular Phone
- KOREA - PCS filter (Rx)

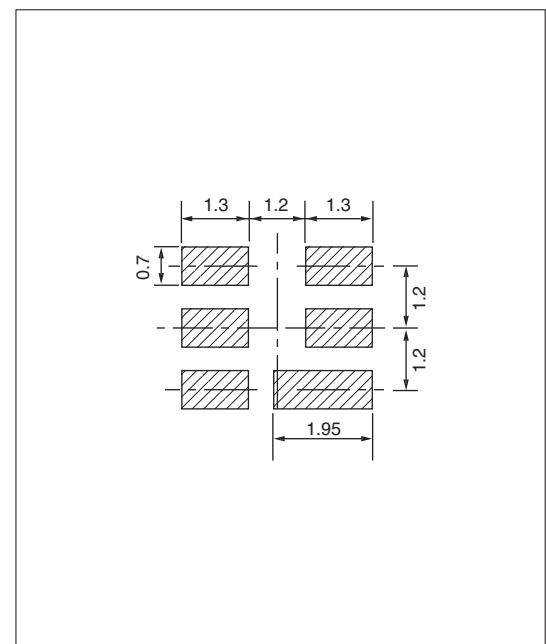
■ Specifications

Type	TQS-920A-7R
Nominal frequency	1855 MHz
Pass band	1840 to 1870 MHz
Insertion loss	3.0 dB max.
Pass band ripple	1.5 dB max.
VSWR	2.0 max.
Stop band attenuation (Referred to through Level)	
1440 to 1470 MHz	25 dB min.
1750 to 1780 MHz	30 dB min.
1930 to 1960 MHz	30 dB min.
2240 to 2270 MHz	30 dB min.
Terminating impedance	50 Ω
Operating temperature range)	-30 °C to +85 °C

■ Package Outlines [Dimensions in mm]



■ Footprint [Dimensions in mm]

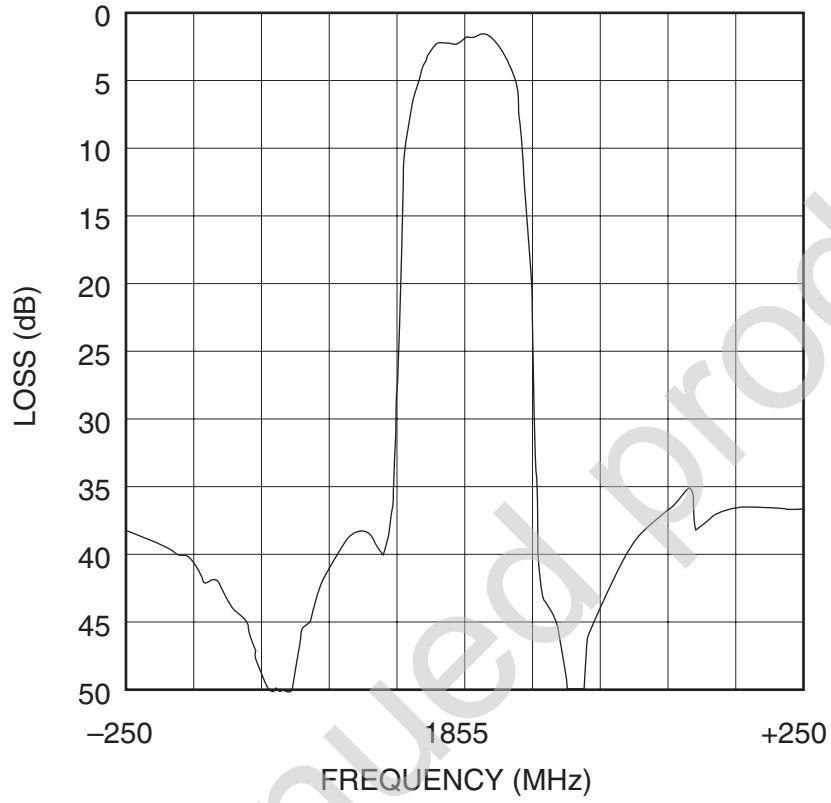


Surface Acoustic Wave Filter (SAW Filter)

RF Filter for Cellular
Phone KOREA-PCS system (Rx)

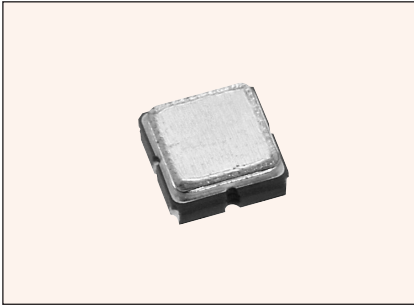
TQS-920A-7R
1855 MHz

■ Electrical Data



Discontinued product

Surface Acoustic Wave Filter (SAW Filter)



TQS-924A-7R

■ Features

- Ultra miniature size : 3.0(W) x 3.0(D) x 1.1(H)mm
- High selectivity

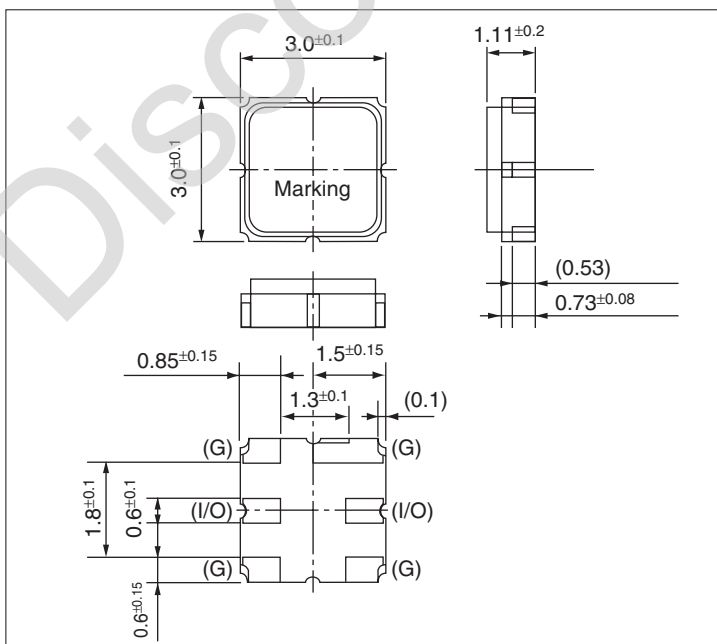
■ Application

- RF filter for Cellular Phone DCS system (Tx)

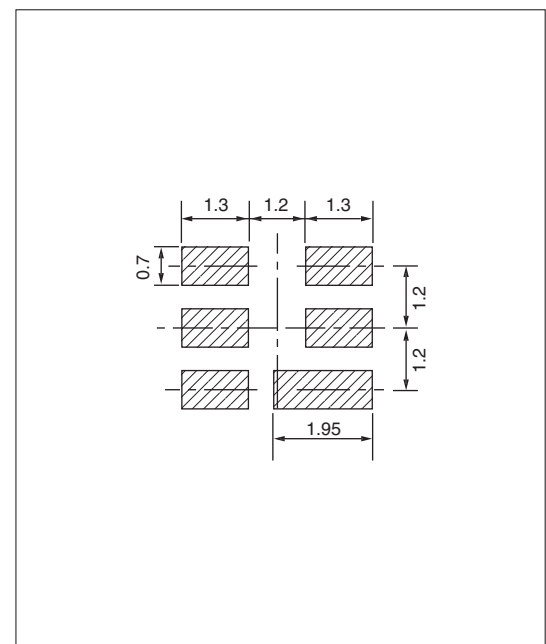
■ Specifications

Type	TQS-924A-7R
Nominal frequency	1747.5 MHz
Pass band	1710 to 1785 MHz
Insertion loss	3.5 dB max.
Pass band ripple	2.7 dB max.
VSWR	2.5 max.
Stop band attenuation (Referred to through Level)	
DC to 1500 MHz	16 dB min.
1500 to 1670 MHz	20 dB min.
1805 to 1880 MHz	7 dB min.
1880 to 3420 MHz	20 dB min.
3420 to 4000 MHz	25 dB min.
4000 to 6000 MHz	15 dB min.
Terminating impedance	50 Ω
Operating temperature range	-20 °C to +70 °C

■ Package Outlines [Dimensions in mm]



■ Footprint [Dimensions in mm]

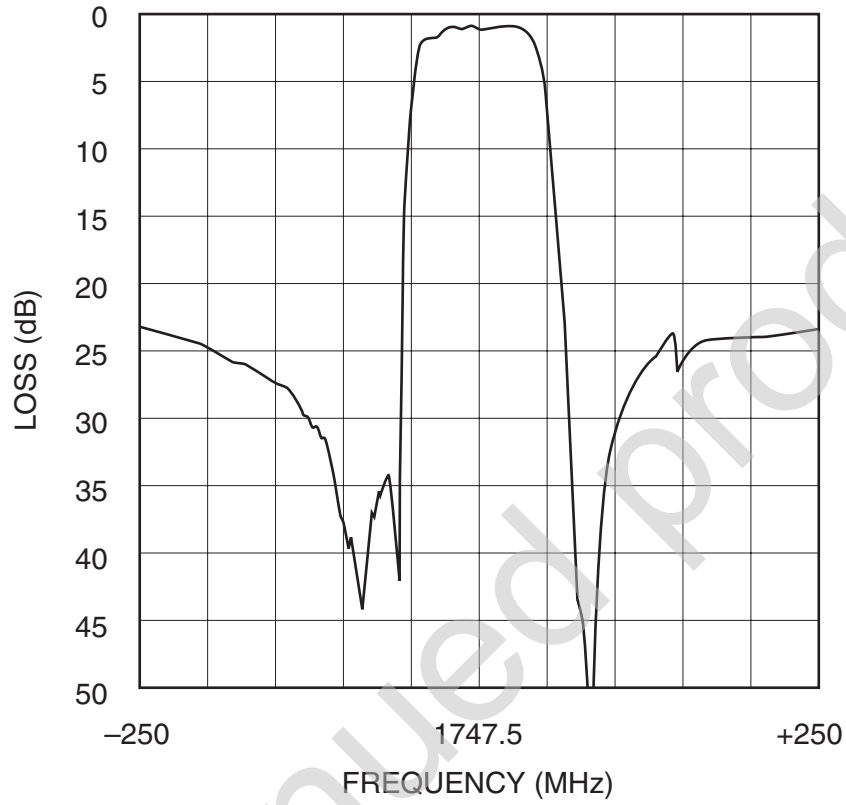


Surface Acoustic Wave Filter (SAW Filter)

RF Filter for Cellular Phone
DCS system (Tx)

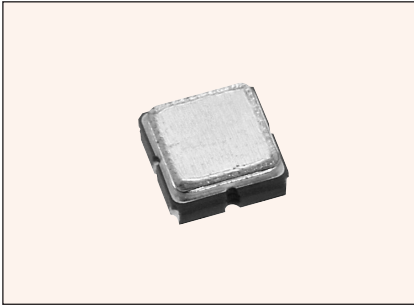
TQS-924A-7R
1747.5 MHz

■ Electrical Data



Discontinued product

Surface Acoustic Wave Filter (SAW Filter)



TQS-925A-7R

■ Features

- Ultra miniature size : 3.0(W) x 3.0(D) x 1.1(H)mm
- High selectivity

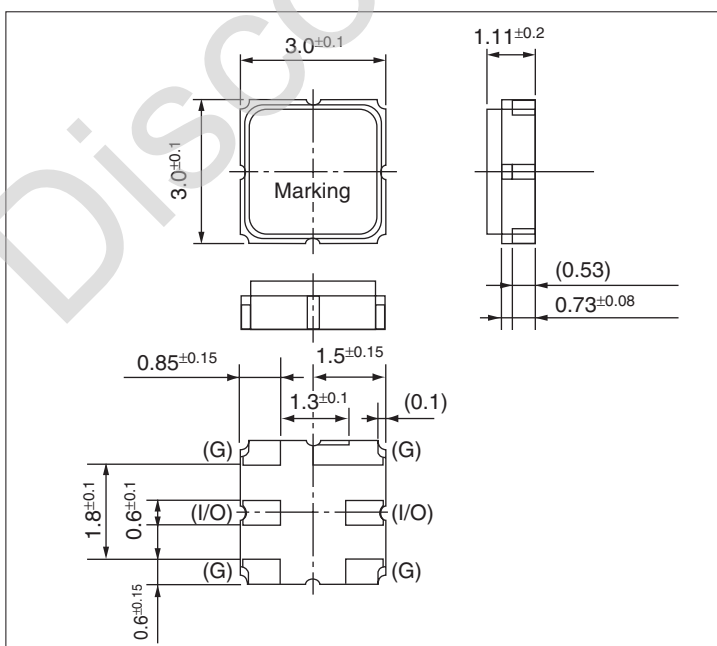
■ Application

- RF filter for Cellular Phone DCS system (Rx)

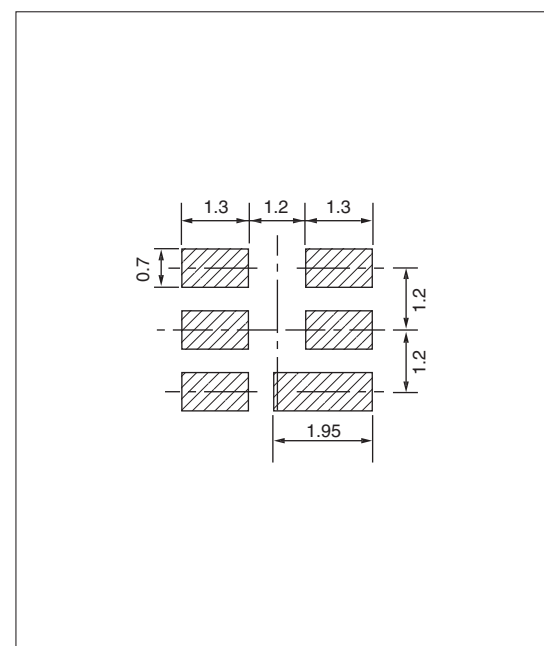
■ Specifications

Type	TQS-925A-7R
Nominal frequency	1842.5MHz
Pass band	1805 to 1880 MHz
Insertion loss	4.2 dB max.
Pass band ripple	3.0 dB max.
VSWR	3.0 max.
Stop band attenuation (Referred to through Level)	
DC to 1500 MHz	20 dB min.
1500 to 1710 MHz	22 dB min.
1710 to 1785 MHz	10 dB min.
1920 to 3760 MHz	25 dB min.
3760 to 6000 MHz	15 dB min.
Input Power	+13dBm max.
Terminating impedance	50 Ω
Operating temperature range	-20 °C to +70 °C

■ Package Outlines [Dimensions in mm]



■ Footprint [Dimensions in mm]

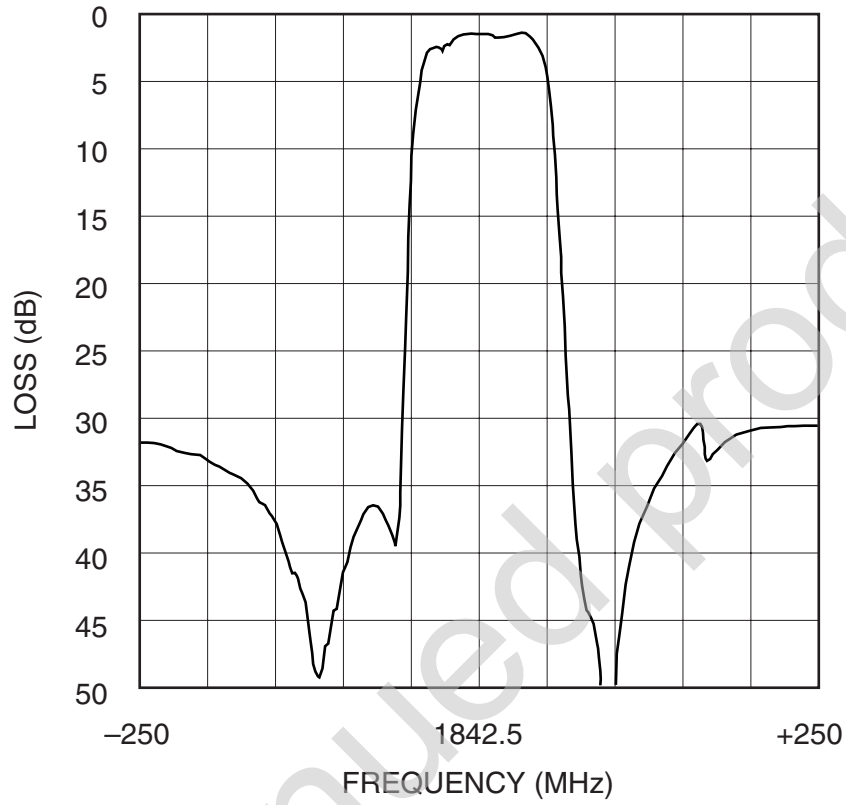


Surface Acoustic Wave Filter (SAW Filter)

RF Filter for Cellular Phone
DCS system (Rx)

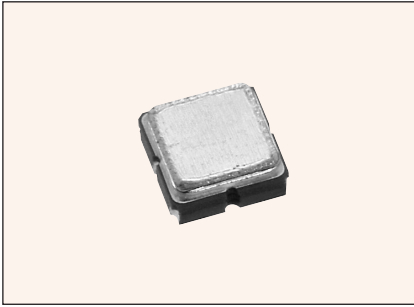
TQS-925A-7R
1842.5 MHz

■ Electrical Data



Discontinued product

Surface Acoustic Wave Filter (SAW Filter)



TQS-932A-7R

■ Features

- Miniature size : 3.0(W) x 3.0(D) x 1.1(H)mm
- Low insertion loss
- High selectivity

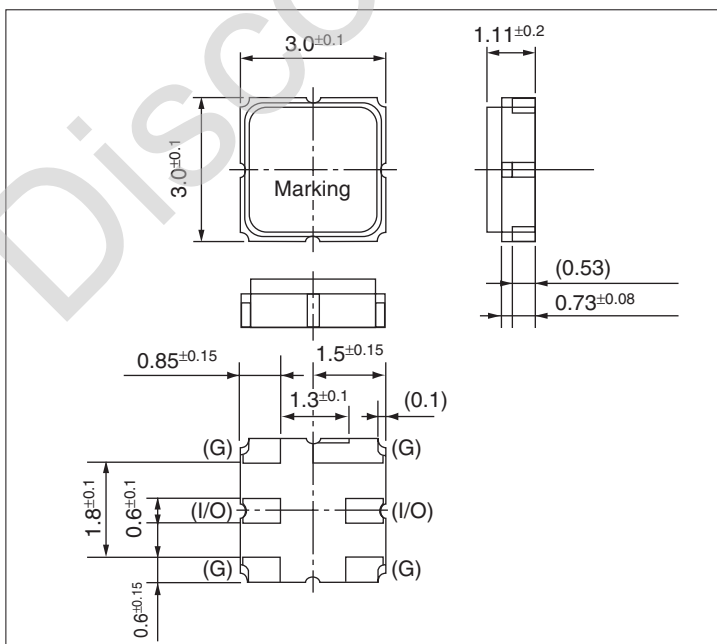
■ Application

- RF filter for Cellular Phone E-GSM system (Tx)

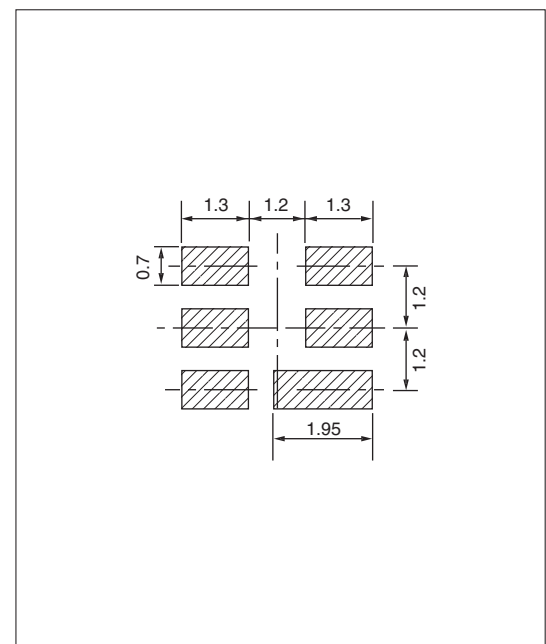
■ Specifications

Type	TQS-932A-7R
Nominal frequency	897.5 MHz
Pass band	880 to 915 MHz
Insertion loss	4.0 dB max.
Pass band ripple	2.5 dB max.
VSWR	2.5 max.
Stop band attenuation (Referred to through Level)	
DC to 845 MHz	20 dB min.
925 to 935 MHz	6 dB min.
935 to 960 MHz	20 dB min.
960 to 1200 MHz	25 dB min.
1200 to 2000 MHz	20 dB min.
2000 to 3000 MHz	10 dB min.
Terminating impedance	50 Ω
Operating temperature range	-20 °C to +70 °C

■ Package Outlines [Dimensions in mm]



■ Footprint [Dimensions in mm]

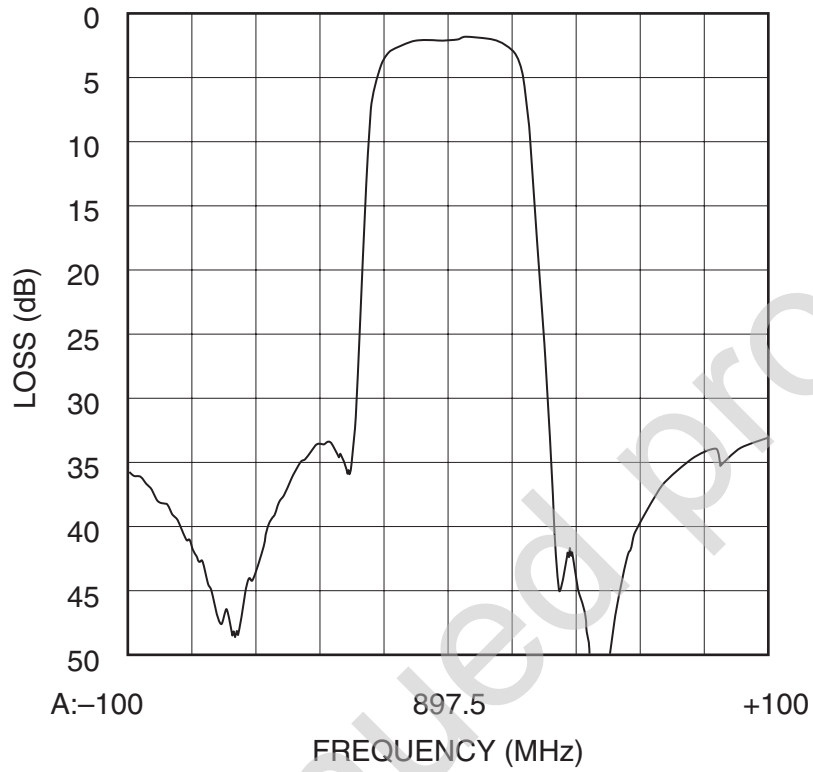


Surface Acoustic Wave Filter (SAW Filter)

RF Filter for Cellular Phone
E-GSM system (Tx)

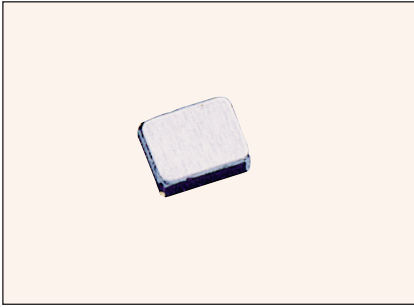
TQS-932A-7R
897.5 MHz

■ Electrical Data



Discontinued product

Surface Acoustic Wave Filter (SAW Filter)



TQS-937AA-7G

■ Features

- Ultra miniature size : 2.5(W) x 2.0(D) x 0.8(H)mm
- High attenuation

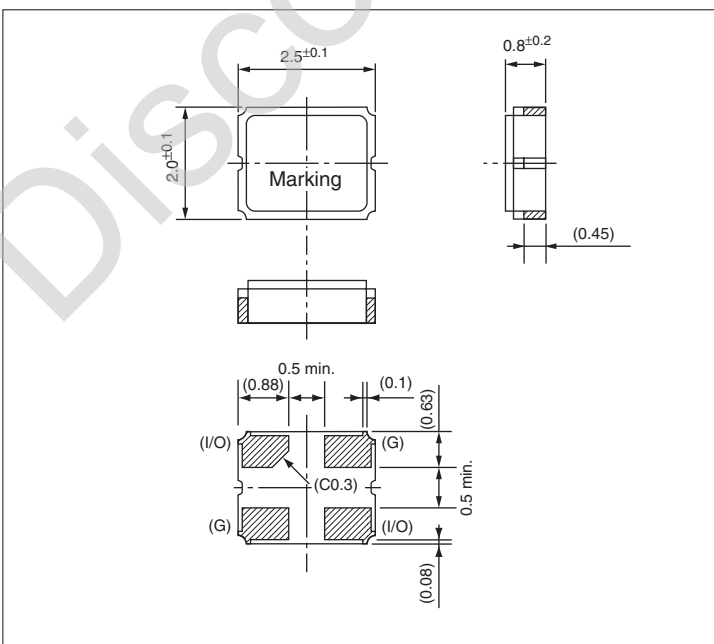
■ Application

- RF filter for Cellular Phone N-CDMA system (Rx)

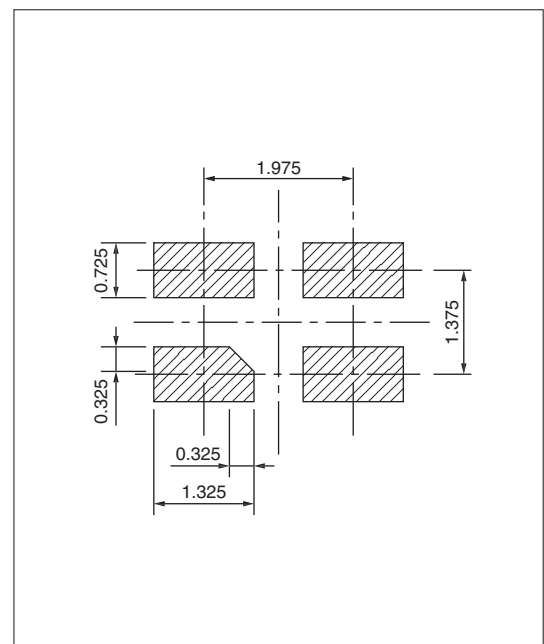
■ Specifications

Type	TQS-937AA-7G
Nominal frequency	851 MHz
Pass band	832 to 870 MHz
Insertion loss	4.0 dB max.
Pass band ripple	2.7 dB max.
VSWR	3.5 max.
Stop band attenuation (Referred to through Level)	
DC to 608 MHz	21 dB min.
608 to 720 MHz	23 dB min.
720 to 760 MHz	27 dB min.
887 to 925 MHz	25 dB min.
925 to 1094 MHz	28 dB min.
1094 to 2000 MHz	15 dB min.
Terminating impedance	50 Ω
Operating temperature range	-20 °C to +75 °C

■ Package Outlines [Dimensions in mm]



■ Footprint [Dimensions in mm]

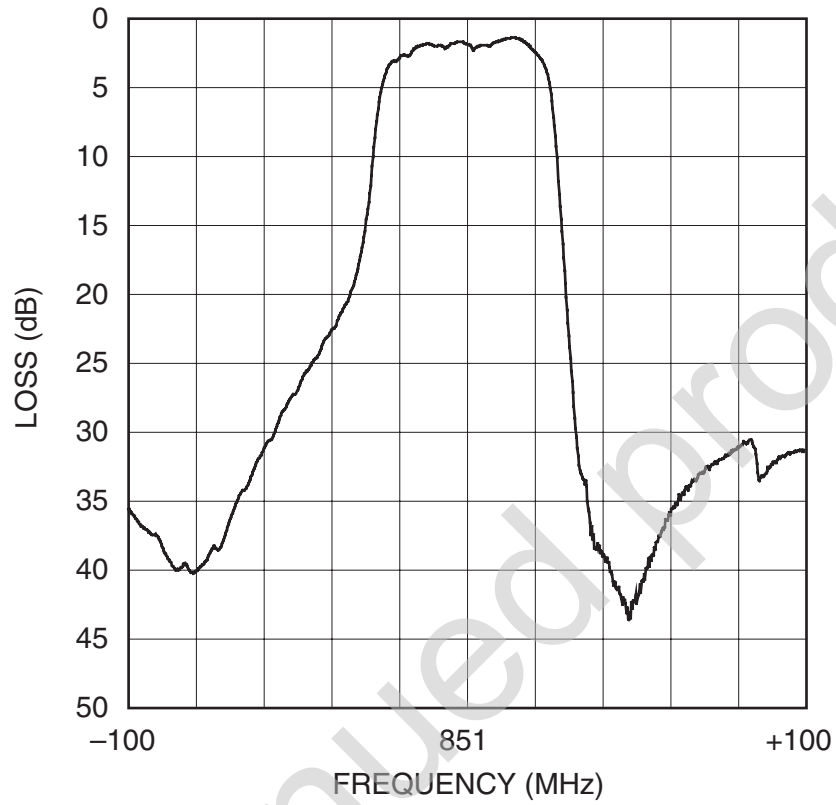


Surface Acoustic Wave Filter (SAW Filter)

RF Filter for Cellular Phone
N-CDMA system (Rx)

TQS-937AA-7G
851 MHz

■ Electrical Data



Surface Acoustic Wave Filter (SAW Filter)



TQS-939DA-7R

Features

- Ultra miniature size : 2.5(W) x 2.0(D) x 1.1(H)mm
- High attenuation

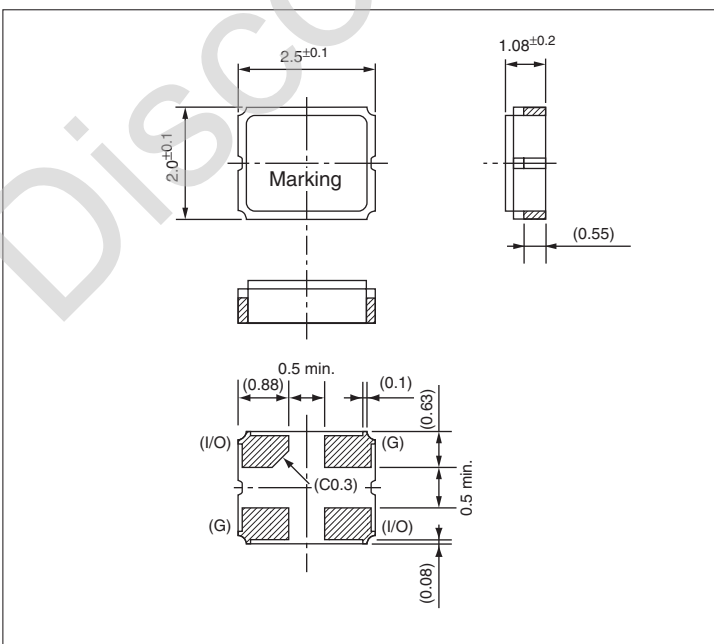
Application

- RF filter for GPS

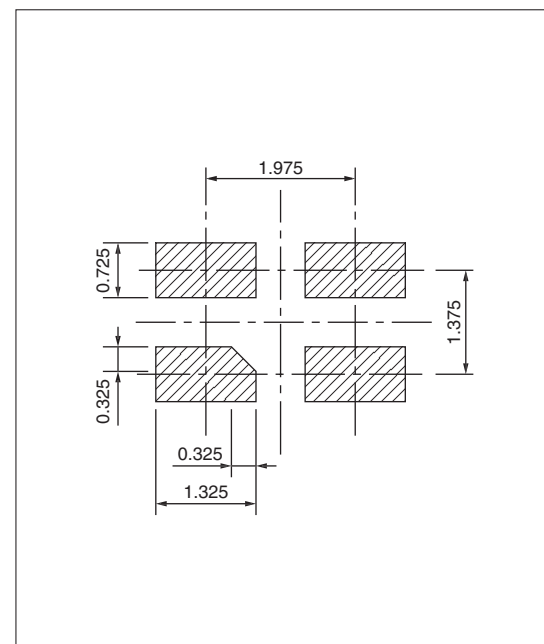
Specifications

Type	TQS-939DA-7R
Nominal frequency	1575.42 MHz
Pass band	1573.42 to 1577.42 MHz
Insertion loss	1.5 dB max.
Pass band ripple	0.5 dB max.
VSWR	2.0 max.
Stop band attenuation (Referred to through Level)	
824.00 to 894.00 MHz	25 dB min.
1475.42 MHz	33 dB min.
1525.42 MHz	15 dB min.
1625.42 MHz	10 dB min.
1675.42 MHz	30 dB min.
1750.00 to 1990.00 MHz	27 dB min.
2400.00 to 2500.00 MHz	30 dB min.
Terminating impedance	50 Ω
Operating temperature range	-30 °C to +85 °C

Package Outlines [Dimensions in mm]



Footprint [Dimensions in mm]

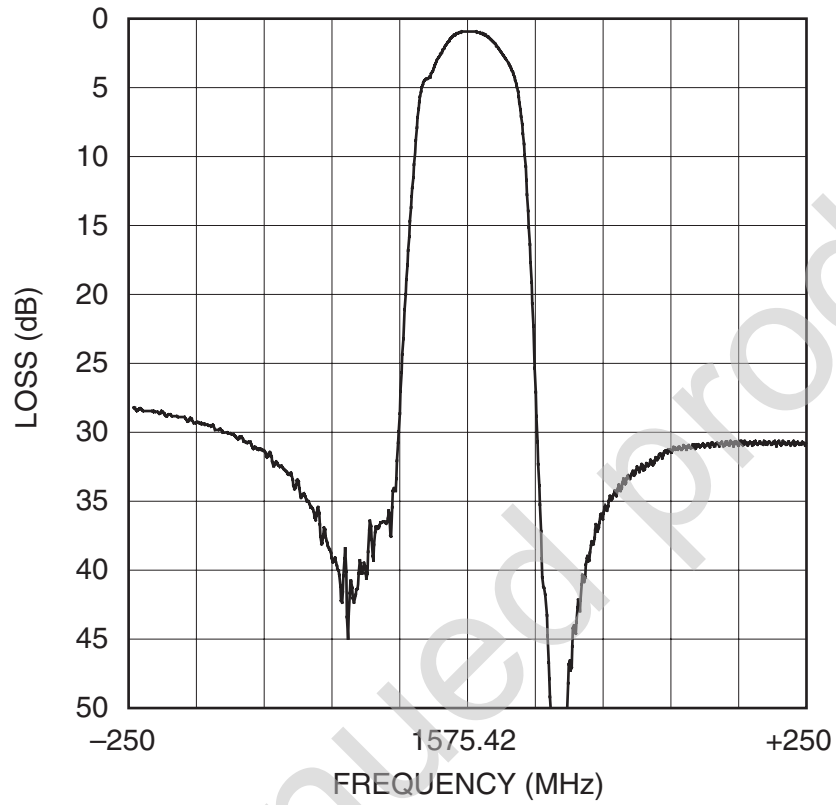


Surface Acoustic Wave Filter (SAW Filter)

RF Filter
for GPS

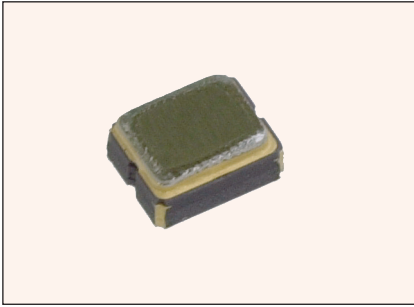
TQS-939DA-7R
1575.42 MHz

■ Electrical Data



Discontinued product

Surface Acoustic Wave Filter (SAW Filter)



TQS-939EA-7R

■ Features

- Ultra miniature size : 2.5(W) x 2.0(D) x 1.1(H)mm
- High attenuation

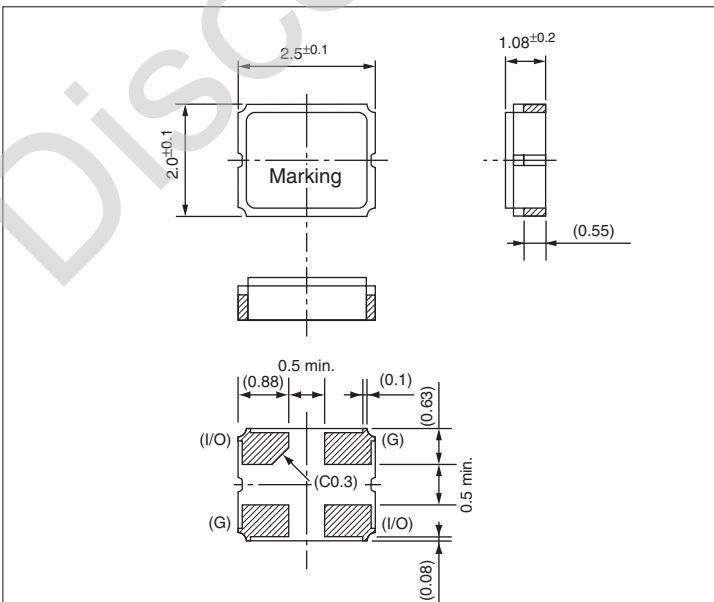
■ Application

- RF filter for GPS

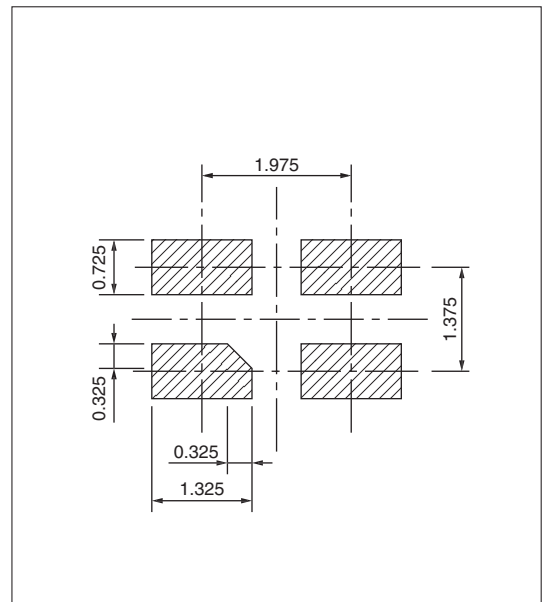
■ Specifications

Type	TQS-939EA-7R
Nominal frequency	1575.42 MHz
Pass band	1573.42 to 1577.42 MHz
Insertion loss	1.6 dB max.
Pass band ripple	0.5 dB max.
VSWR	2.0 max.
Stop band attenuation (Referred to through Level)	
824.00 to 894.00 MHz	34 dB min.
832.00 to 925.00 MHz	34 dB min.
1208.22 MHz	36 dB min.
1355.42 MHz	40 dB min.
1391.82 MHz	43 dB min.
1465.42 MHz	36 dB min.
1429.00 to 1501.00 MHz	34 dB min.
1501.00 to 1525.00 MHz	23 dB min.
1626.50 to 1660.50 MHz	10 dB min.
1750.00 to 1870.00 MHz	41 dB min.
1850.00 to 1990.00 MHz	38 dB min.
1920.00 to 2170.00 MHz	34 dB min.
2400.00 to 2500.00 MHz	30 dB min.
Terminating impedance	50 Ω
Operating temperature range	-30 °C to +85 °C

■ Package Outlines [Dimensions in mm]



■ Footprint [Dimensions in mm]

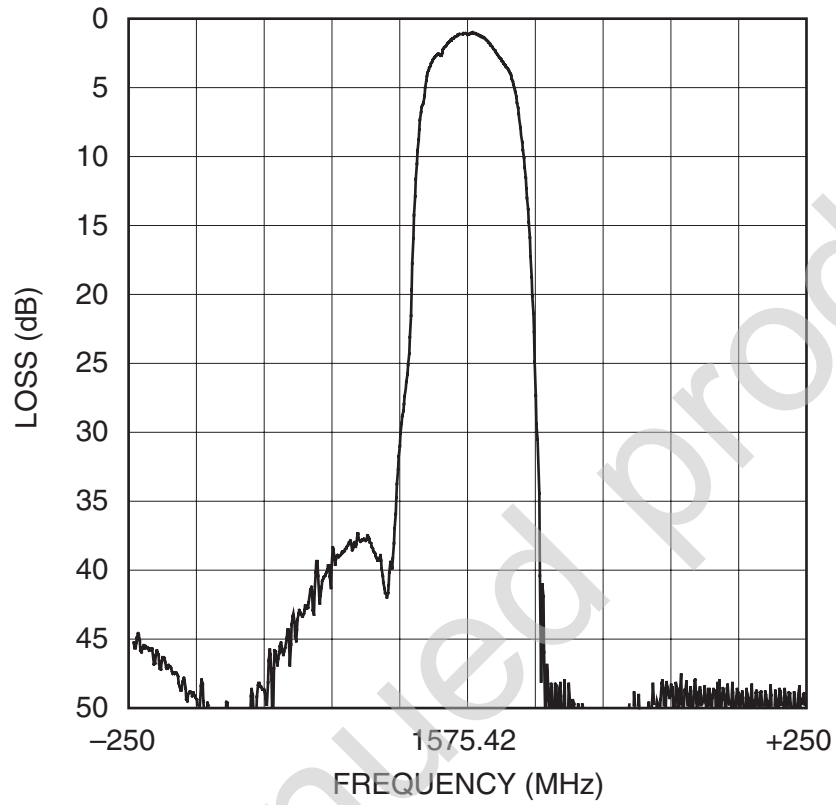


Surface Acoustic Wave Filter (SAW Filter)

RF Filter
for GPS

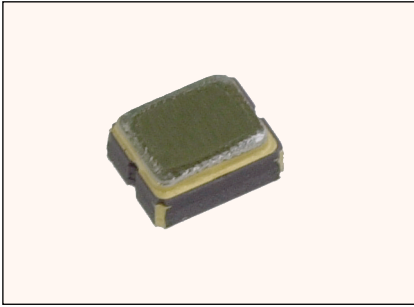
TQS-939EA-7R
1575.42 MHz

■ Electrical Data



Discontinued product

Surface Acoustic Wave Filter (SAW Filter)



TQS-939FA-7R

Features

- Ultra miniature size : 2.5(W) x 2.0(D) x 1.1(H)mm
- High attenuation

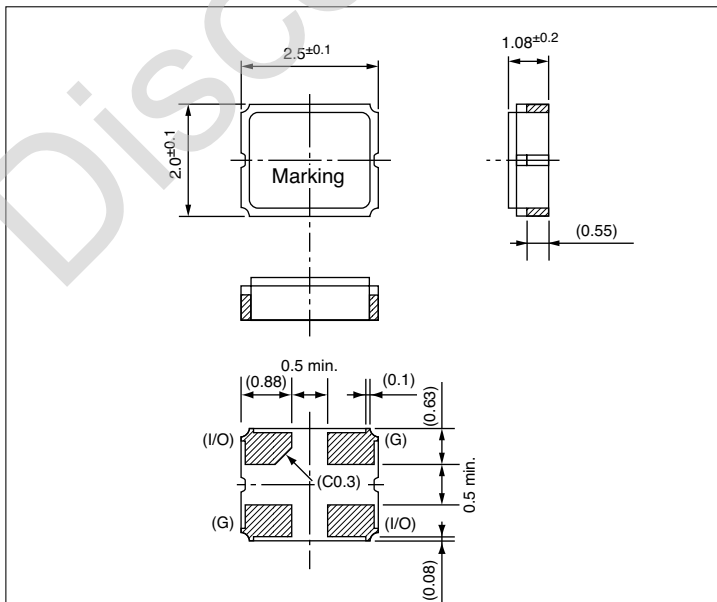
Application

- RF filter for GPS

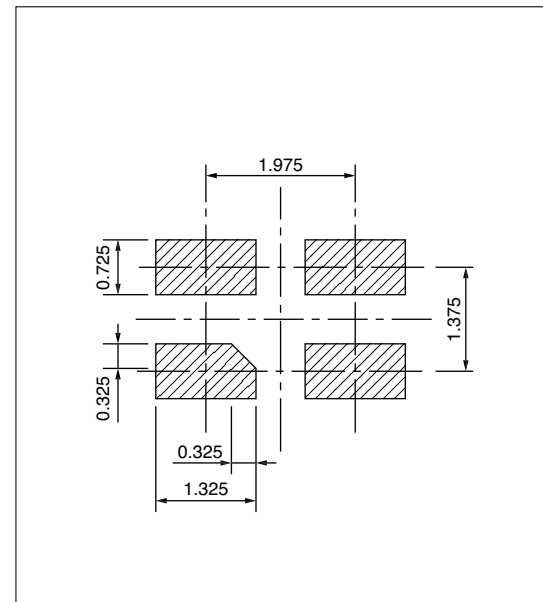
Specifications

Type	TQS-939FA-7R
Nominal frequency	1575.42 MHz
Pass band	1573.42 to 1577.42 MHz
Insertion loss	2.5 dB max.
Pass band ripple	0.9 dB max.
VSWR	2.5 max.
Stop band attenuation (Referred to through Level)	
824.00 to 894.00 MHz	48 dB min.
832.00 to 925.00 MHz	48 dB min.
1208.22 MHz	47 dB min.
1355.42 MHz	41 dB min.
1391.82 MHz	40 dB min.
1465.42 MHz	36 dB min.
1429.00 to 1501.00 MHz	36 dB min.
1501.00 to 1525.00 MHz	35 dB min.
1626.50 to 1660.50 MHz	35 dB min.
1750.00 to 1870.00 MHz	36 dB min.
1850.00 to 1990.00 MHz	35 dB min.
1920.00 to 2170.00 MHz	32 dB min.
2400.00 to 2500.00 MHz	30 dB min.
Terminating impedance	50 Ω
Operating temperature range	-30 °C to +85 °C

Package Outlines [Dimensions in mm]



Footprint [Dimensions in mm]

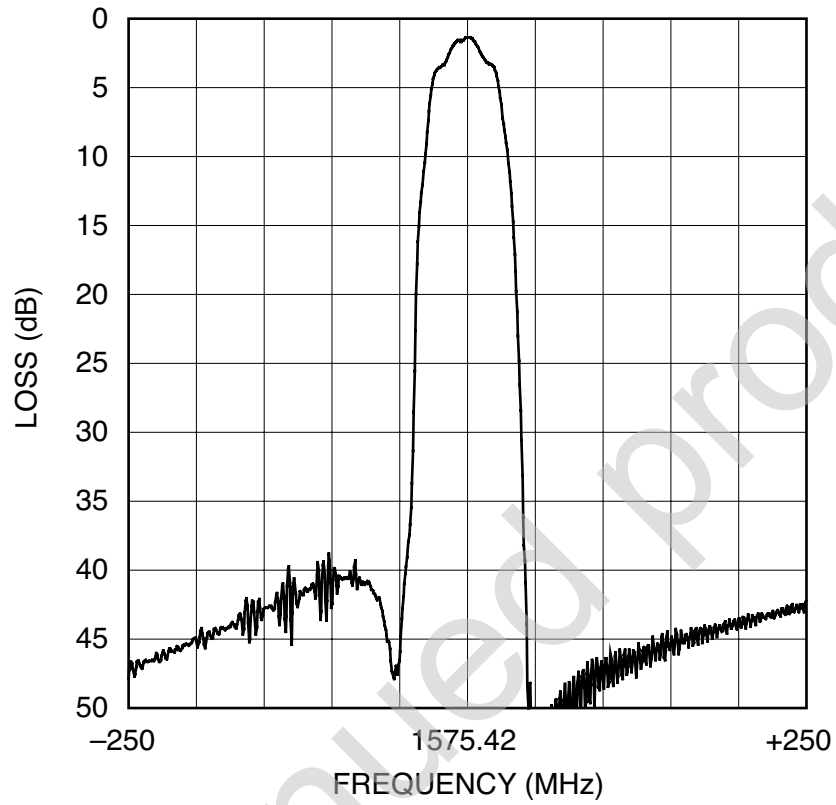


Surface Acoustic Wave Filter (SAW Filter)

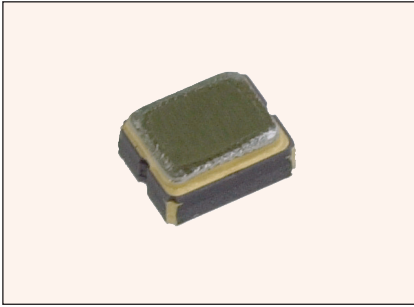
RF Filter
for GPS

TQS-939FA-7R
1575.42 MHz

■ Electrical Data



Surface Acoustic Wave Filter (SAW Filter)



TQS-939XP-7R

Under Development

■ Features

- Ultra miniature size : 2.5(W) x 2.0(D) x 1.1(H)mm
- High attenuation

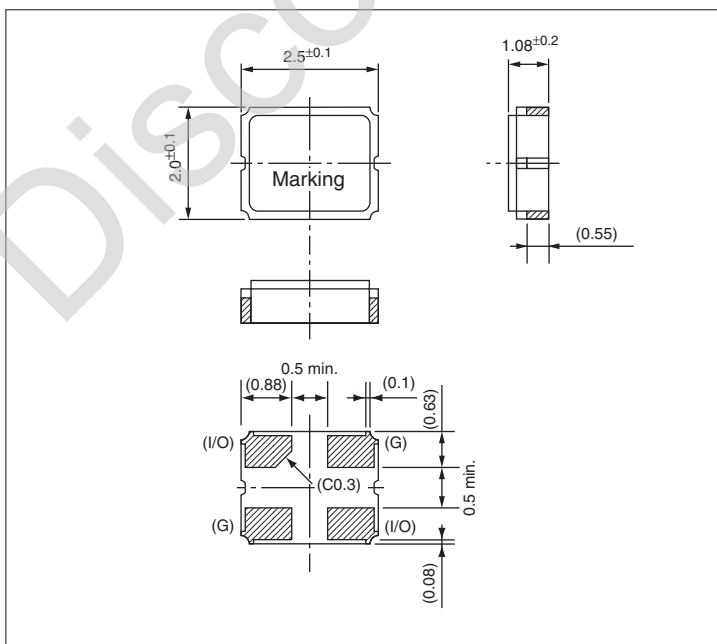
■ Application

- RF filter for GPS

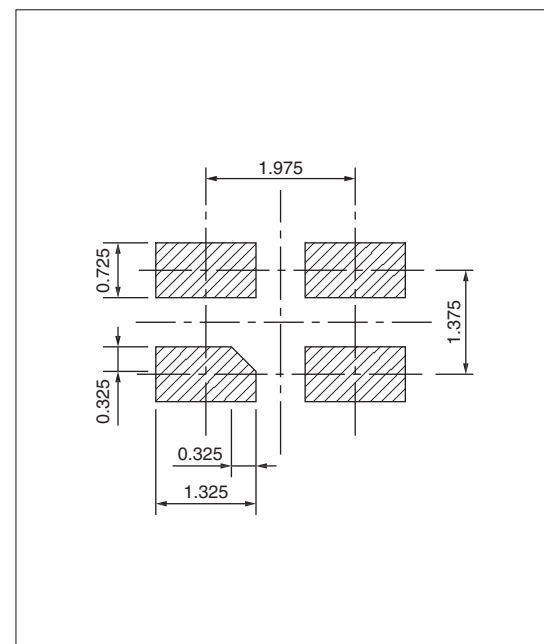
■ Specifications

Type	TQS-939XP-7R
Nominal frequency	1575.42 MHz
Pass band	1573.42 to 1577.42 MHz
Insertion loss	1.5 dB max.
Pass band ripple	0.5 dB max.
VSWR	2.0 max.
Stop band attenuation (Referred to through Level)	
732.71 MHz	23 dB min.
832.00 to 925.00 MHz	23 dB min.
1355.42 MHz	30 dB min.
1465.42 MHz	34 dB min.
1429.00 to 1501.00 MHz	30 dB min.
1501.00 to 1525.00 MHz	23 dB min.
1626.00 MHz	16 dB min.
1676.00 MHz	30 dB min.
Terminating impedance	50 Ω
Operating temperature range	-20 °C to +85 °C

■ Package Outlines [Dimensions in mm]



■ Footprint [Dimensions in mm]

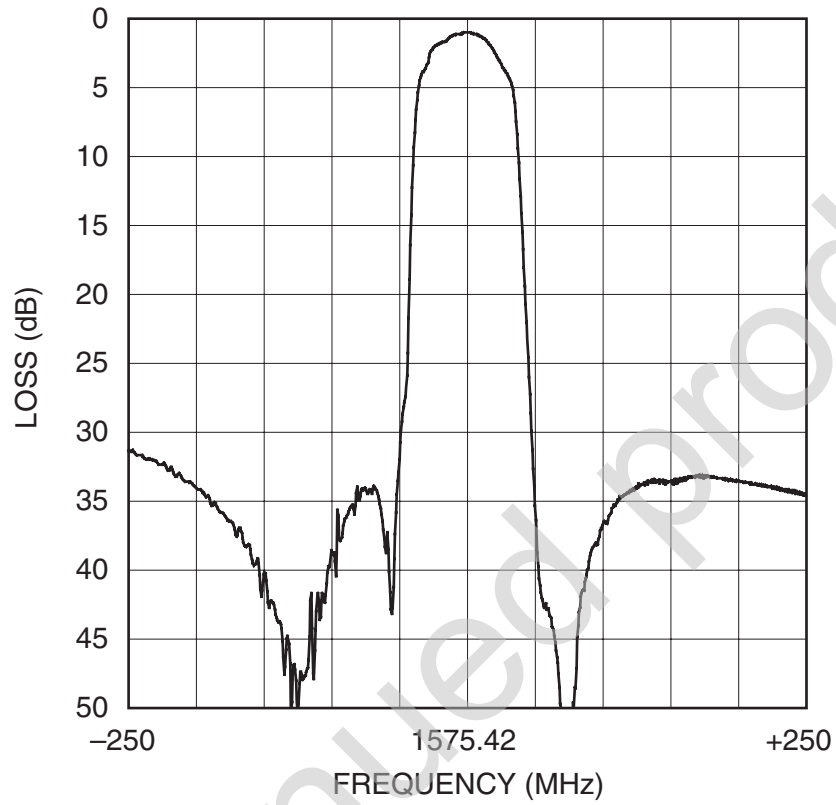


Surface Acoustic Wave Filter (SAW Filter)

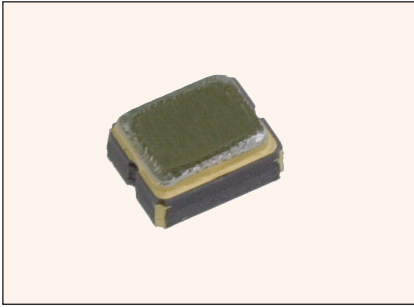
RF Filter
for GPS

TQS-939XP-7R
1575.42 MHz

■ Electrical Data



Surface Acoustic Wave Filter (SAW Filter)



TQS-939XS-7R

Under Development

■ Features

- Ultra miniature size : 2.5(W) x 2.0(D) x 1.1(H)mm
- High attenuation

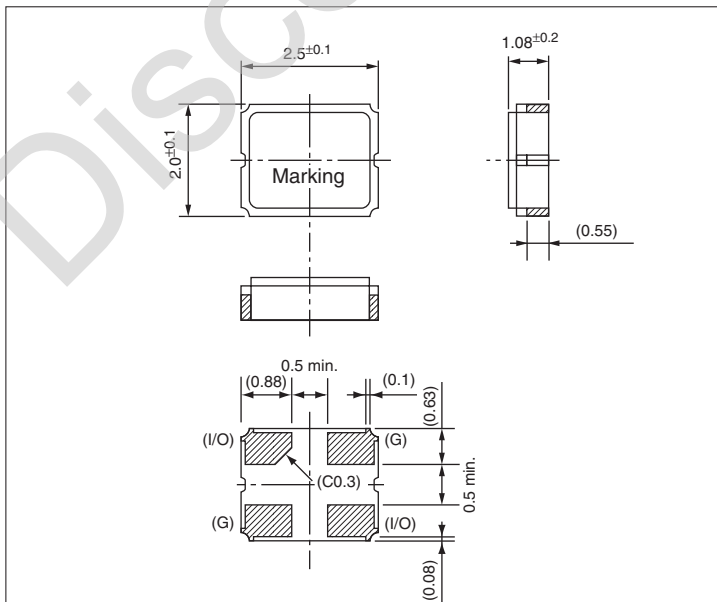
■ Application

- RF filter for GPS

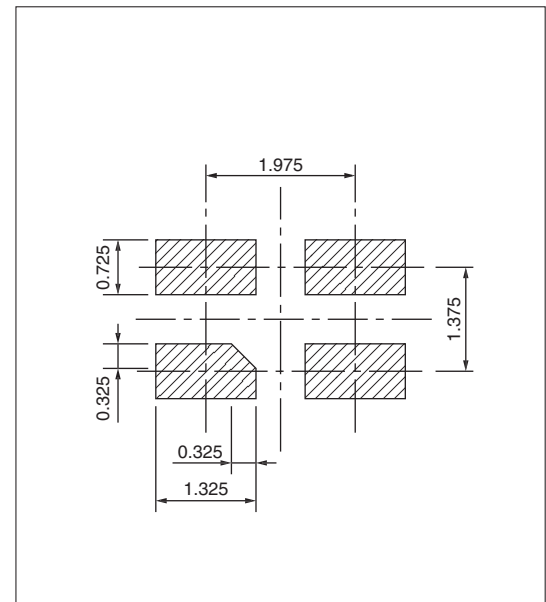
■ Specifications

Type	TQS-939XS-7R
Nominal frequency	1575.42 MHz
Pass band	1573.42 to 1577.42 MHz
Insertion loss	2.0 dB max.
Pass band ripple	0.7 dB max.
VSWR	2.5 max.
Stop band attenuation (Referred to through Level)	
824.00 to 894.00 MHz	38 dB min.
832.00 to 925.00 MHz	38 dB min.
1208.22 MHz	38 dB min.
1355.42 MHz	40 dB min.
1391.82 MHz	41 dB min.
1465.42 MHz	40 dB min.
1429.00 to 1501.00 MHz	34 dB min.
1501.00 to 1525.00 MHz	23 dB min.
1626.50 to 1660.50 MHz	30 dB min.
1750.00 to 1870.00 MHz	42 dB min.
1850.00 to 1990.00 MHz	42 dB min.
1920.00 to 2170.00 MHz	37 dB min.
2400.00 to 2500.00 MHz	33 dB min.
Terminating impedance	50 Ω
Operating temperature range	-30 °C to +85 °C

■ Package Outlines [Dimensions in mm]



■ Footprint [Dimensions in mm]

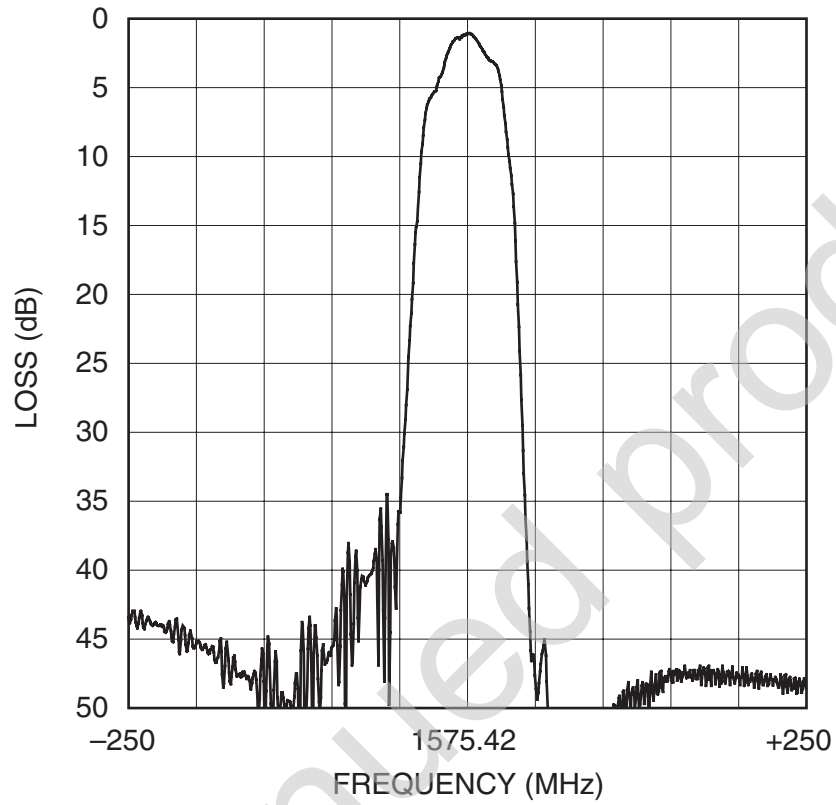


Surface Acoustic Wave Filter (SAW Filter)

RF Filter
for GPS

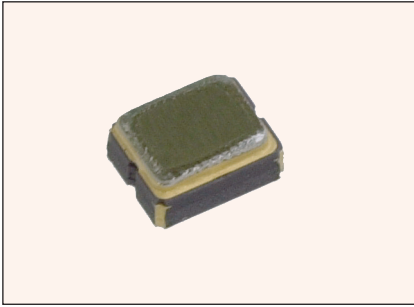
TQS-939XS-7R
1575.42 MHz

■ Electrical Data



Discontinued product

Surface Acoustic Wave Filter (SAW Filter)



TQS-939XT-7R

Under Development

■ Features

- Ultra miniature size : 2.5(W) x 2.0(D) x 1.1(H)mm
- High attenuation

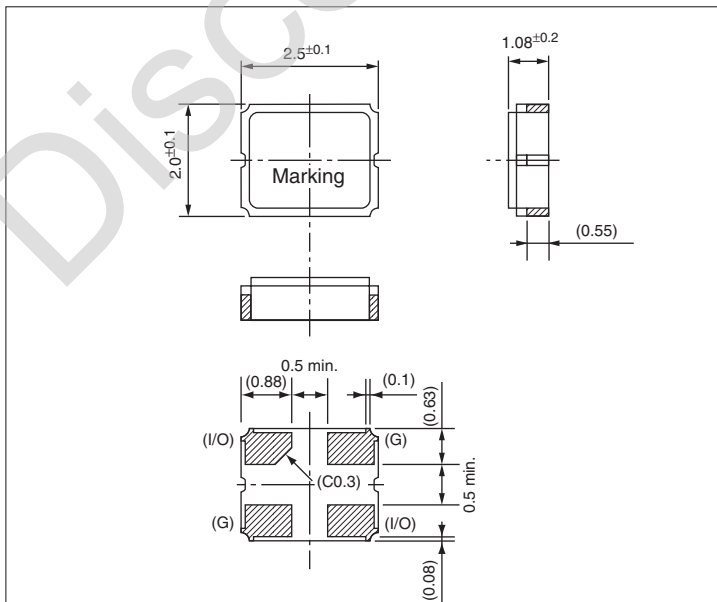
■ Application

- RF filter for GPS

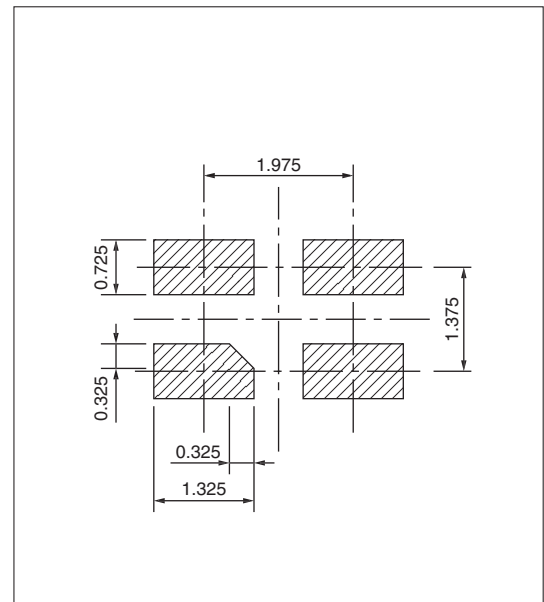
■ Specifications

Type	TQS-939XT-7R
Nominal frequency	1575.42 MHz
Pass band	1573.42 to 1577.42 MHz
Insertion loss	2.5 dB max.
Pass band ripple	0.9 dB max.
VSWR	2.5 max.
Stop band attenuation (Referred to through Level)	
824.00 to 894.00 MHz	48 dB min.
832.00 to 925.00 MHz	48 dB min.
1208.22 MHz	47 dB min.
1355.42 MHz	41 dB min.
1391.82 MHz	40 dB min.
1465.42 MHz	36 dB min.
1429.00 to 1501.00 MHz	36 dB min.
1501.00 to 1525.00 MHz	35 dB min.
1626.50 to 1660.50 MHz	35 dB min.
1750.00 to 1870.00 MHz	36 dB min.
1850.00 to 1990.00 MHz	35 dB min.
1920.00 to 2170.00 MHz	32 dB min.
2400.00 to 2500.00 MHz	30 dB min.
Terminating impedance	50 Ω
Operating temperature range	-30 °C to +85 °C

■ Package Outlines [Dimensions in mm]



■ Footprint [Dimensions in mm]

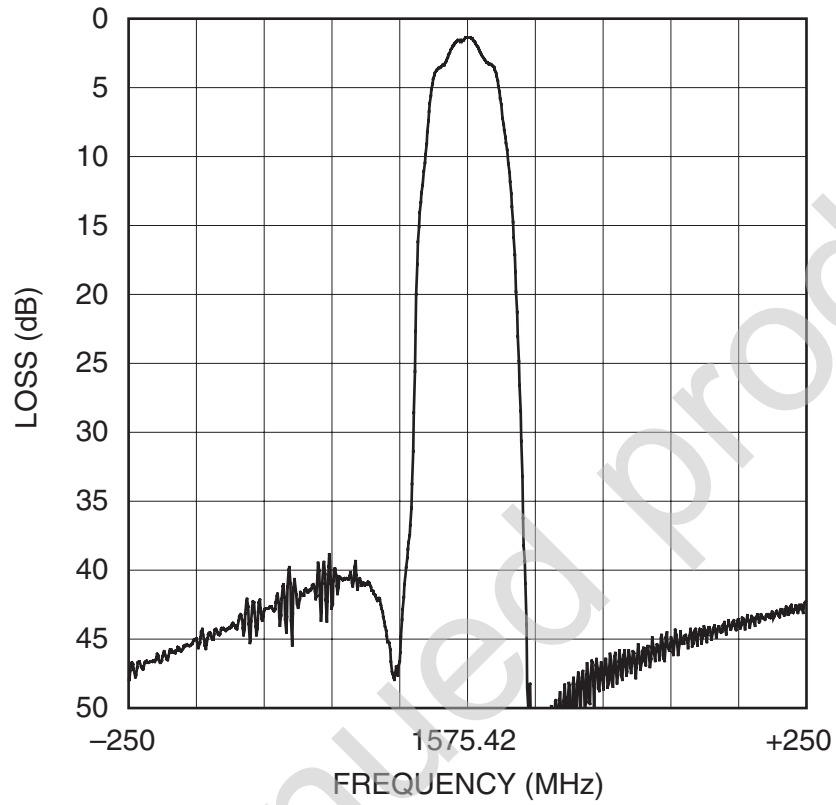


Surface Acoustic Wave Filter (SAW Filter)

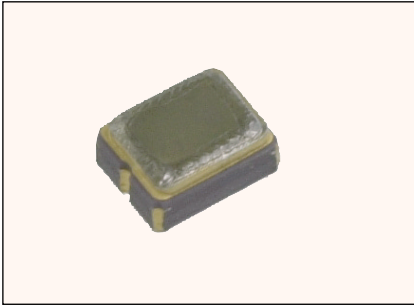
RF Filter
for GPS

TQS-939XT-7R
1575.42 MHz

■ Electrical Data



Surface Acoustic Wave Filter (SAW Filter)



TQS-940AB-7R

■ Features

- Ultra miniature size : 2.5(W) x 2.0(D) x 1.1(H)mm
- High attenuation

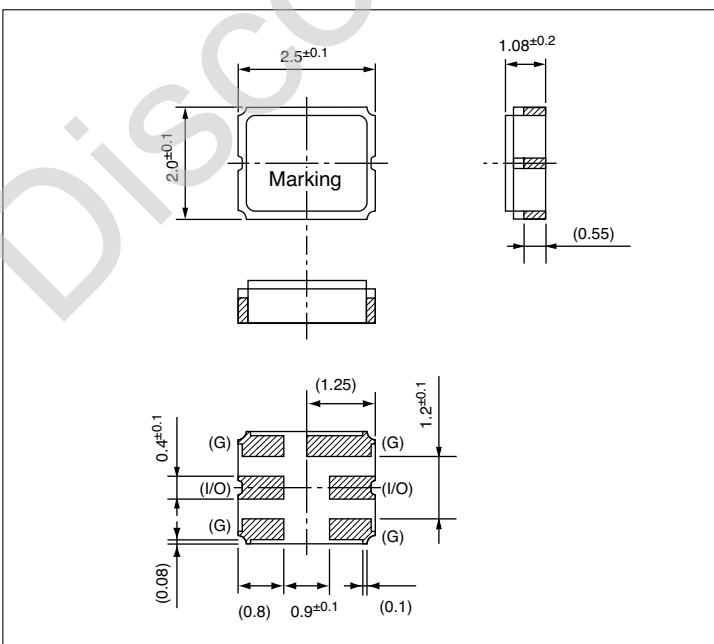
■ Application

- RF filter for Cellular Phone W-CDMA system (Tx)

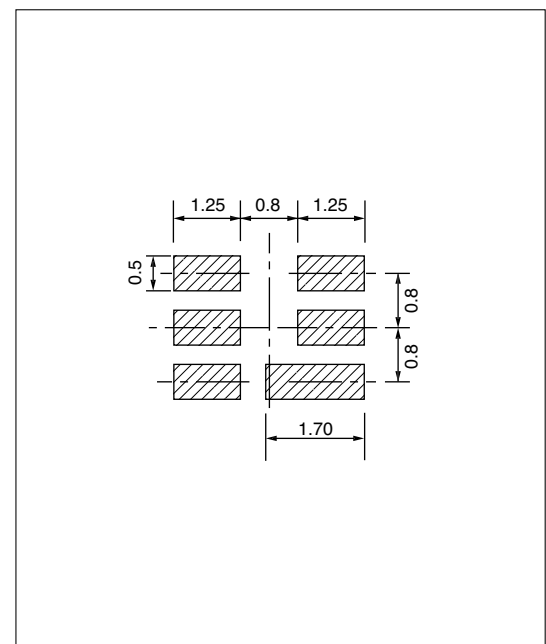
■ Specifications

Type	TQS-940AB-7R
Nominal frequency	1950.0 MHz
Pass band	1920 to 1980 MHz
Insertion loss	3.0 dB max.
Pass band ripple	1.7 dB max.
VSWR	3.0 max.
Stop band attenuation (Referred to through Level)	
DC to 1805 MHz	25 dB min.
1805 to 1880 MHz	15 dB min.
2110 to 2170 MHz	35 dB min.
2170 to 2550 MHz	33 dB min.
2550 to 3120 MHz	30 dB min.
3120 to 3960 MHz	20 dB min.
3960 to 6000 MHz	3 dB min.
Terminating impedance	50 Ω
Operating temperature range	-20 °C to +85 °C

■ Package Outlines [Dimensions in mm]



■ Footprint [Dimensions in mm]

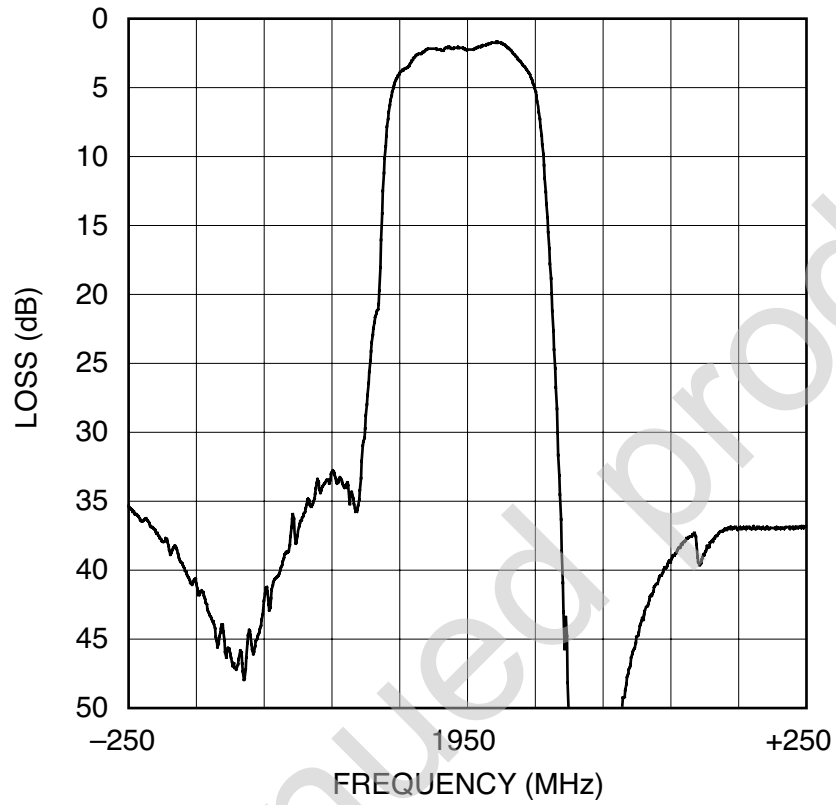


Surface Acoustic Wave Filter (SAW Filter)

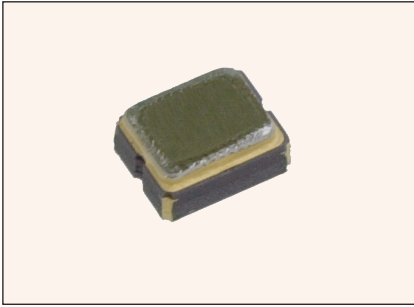
RF Filter for Cellular Phone
W-CDMA system (Tx)

TQS-940AB-7R
1950 MHz

■ Electrical Data



Surface Acoustic Wave Filter (SAW Filter)



TQS-941AA-7R

■ Features

- Ultra miniature size : 2.5(W) x 2.0(D) x 1.1(H)mm
- High attenuation

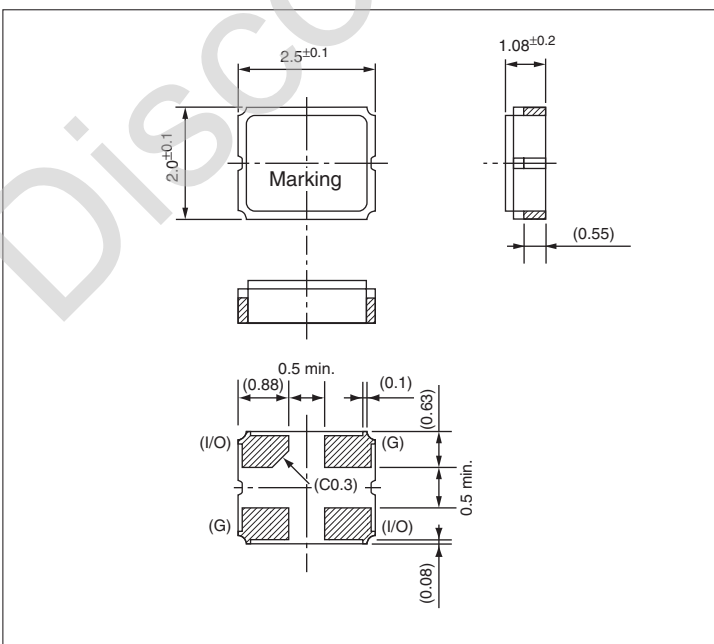
■ Application

- RF filter for Cellular Phone W-CDMA system (Tx)

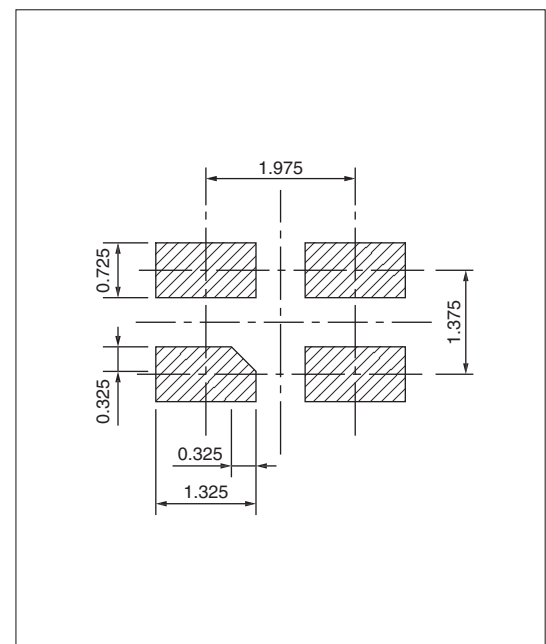
■ Specifications

Type	TQS-941AA-7R
Nominal frequency	1950 MHz
Pass band	1920 to 1980 MHz
Insertion loss	3.0 dB max.
Pass band ripple	1.0 dB max.
VSWR	3.0 max.
Stop band attenuation (Referred to through Level)	
DC to 1805 MHz	24 dB min.
1805 to 1880 MHz	15 dB min.
2110 to 2170 MHz	36 dB min.
2170 to 2550 MHz	28 dB min.
2550 to 3120 MHz	23 dB min.
3120 to 3960 MHz	22 dB min.
3960 to 6000 MHz	5 dB min.
Terminating impedance	50 Ω
Operating temperature range	-20 °C to +85 °C

■ Package Outlines [Dimensions in mm]



■ Footprint [Dimensions in mm]

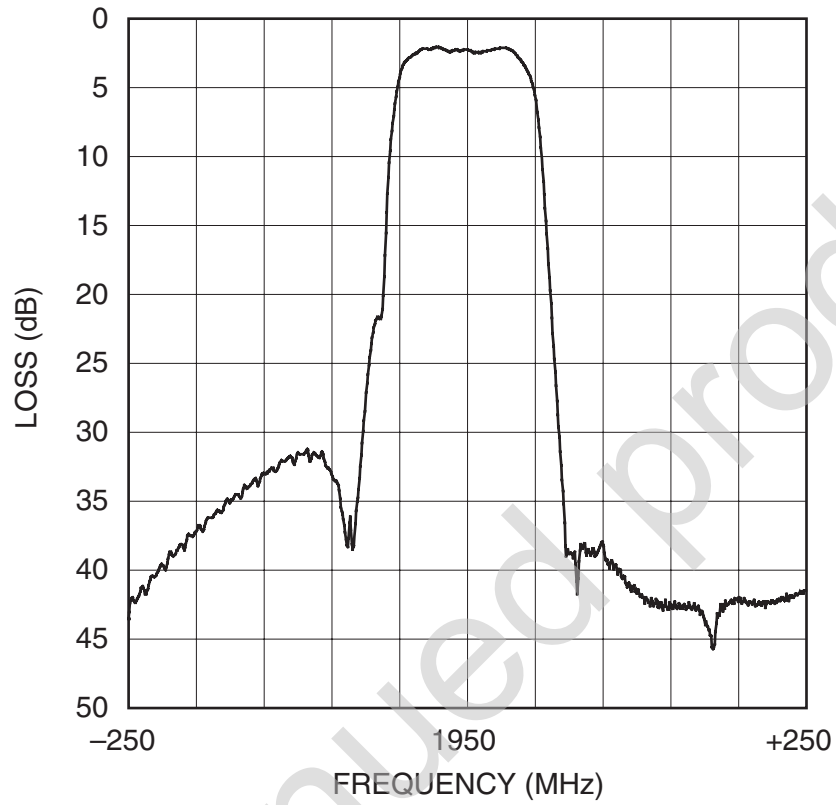


Surface Acoustic Wave Filter (SAW Filter)

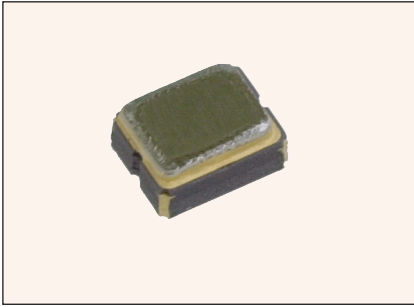
RF Filter for Cellular Phone
W-CDMA system (Tx)

TQS-941AA-7R
1950 MHz

■ Electrical Data



Surface Acoustic Wave Filter (SAW Filter)



TQS-942AA-7R

■ Features

- Ultra miniature size : 2.5(W) x 2.0(D) x 1.1(H)mm
- High selectivity

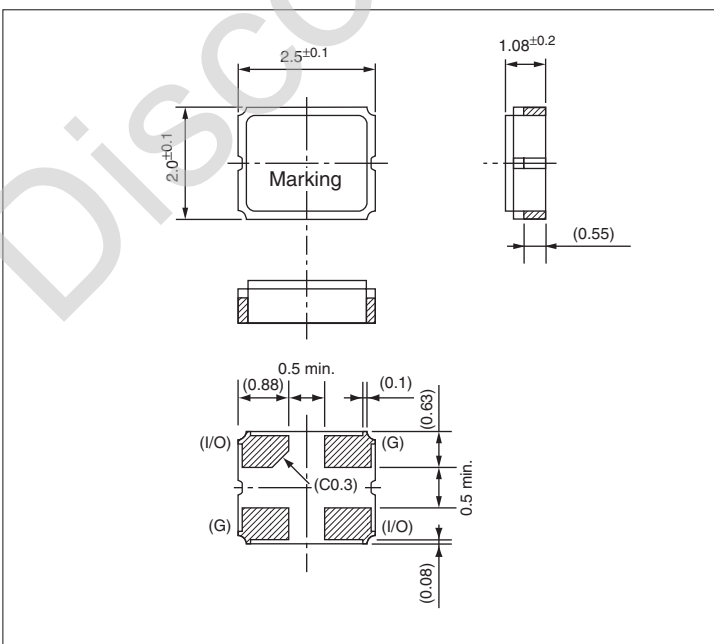
■ Application

- RF filter for Cellular Phone PCS system (Tx)

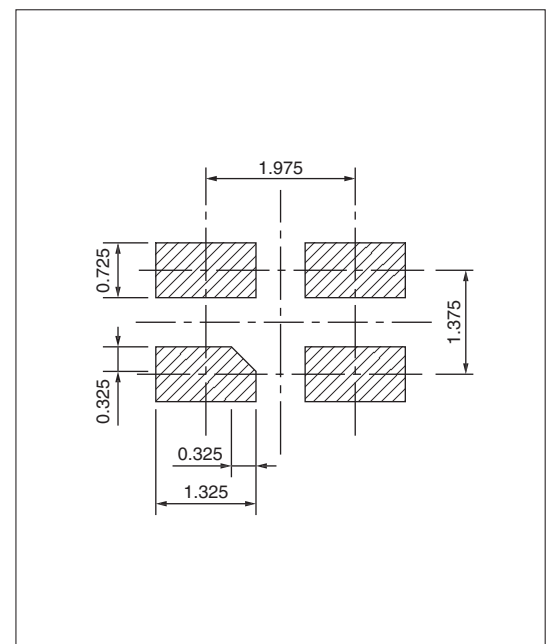
■ Specifications

Type	TQS-942AA-7R
Nominal frequency	1880 MHz
Pass band	1850 to 1910 MHz
Insertion loss	4.0 dB max.
Pass band ripple	2.7 dB max.
VSWR	3.0 max.
Stop band attenuation (Referred to through Level)	
DC to 1500 MHz	22 dB min.
1500 to 1800 MHz	25 dB min.
1930 to 1960 MHz	8 dB min.
1960 to 1990 MHz	30 dB min.
1990 to 2200 MHz	32 dB min.
2200 to 3820 MHz	20 dB min.
3820 to 6000 MHz	5 dB min.
Terminating impedance	50 Ω
Operating temperature range	-30 °C to +85 °C

■ Package Outlines [Dimensions in mm]



■ Footprint [Dimensions in mm]

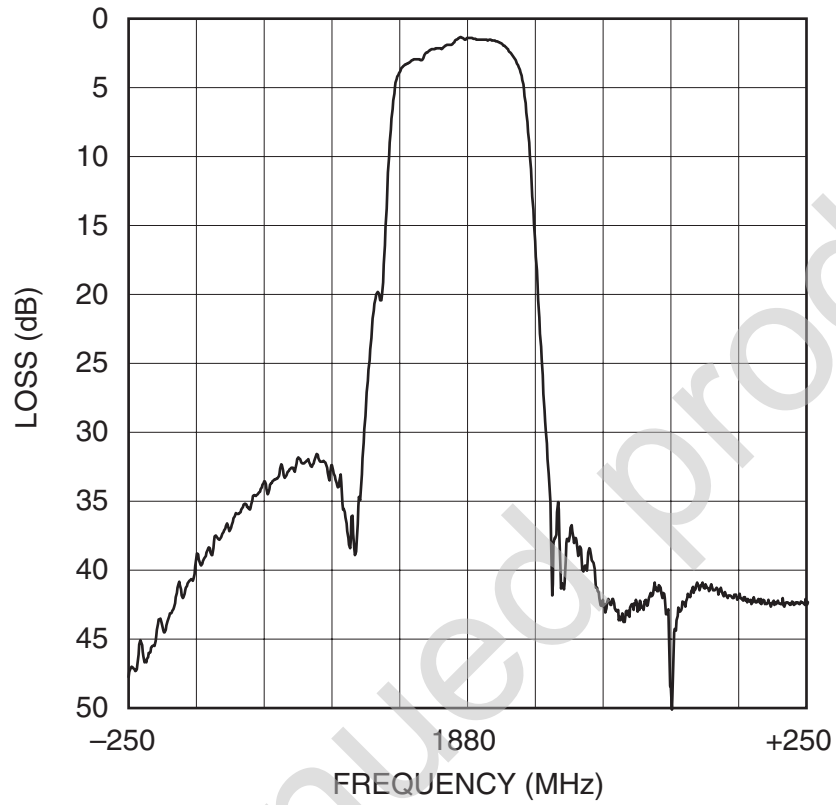


Surface Acoustic Wave Filter (SAW Filter)

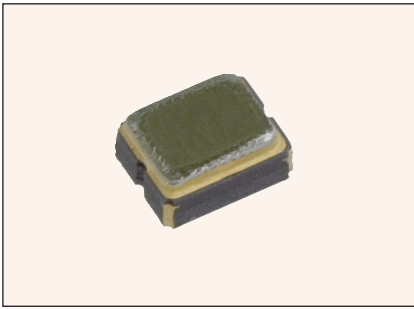
RF Filter for Cellular Phone
 PCS system (Tx)

TQS-942AA-7R
 1880 MHz

■ Electrical Data



Surface Acoustic Wave Filter (SAW Filter)



TQS-943AA-7R

■ Features

- Ultra miniature size : 2.5(W) x 2.0(D) x 1.1(H)mm
- High selectivity

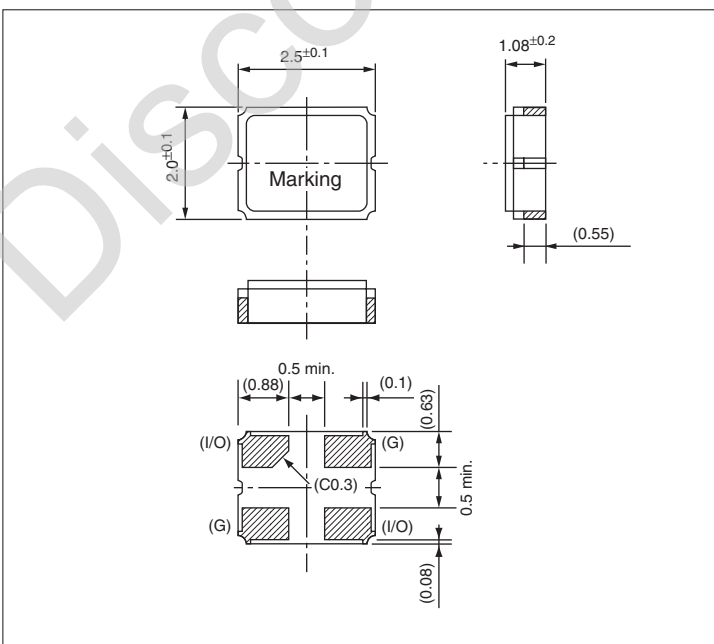
■ Application

- RF filter for Cellular Phone PCS system (Rx)

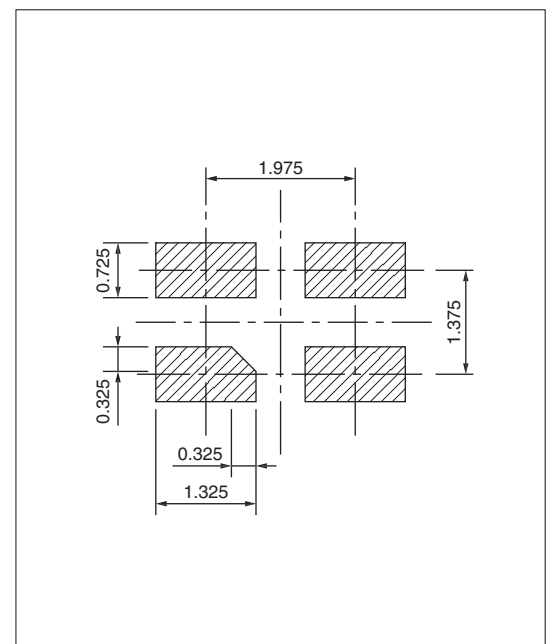
■ Specifications

Type	TQS-943AA-7R
Nominal frequency	1960 MHz
Pass band	1930 to 1990 MHz
Insertion loss	4.0 dB max.
Pass band ripple	3.0 dB max.
VSWR	2.8 max.
Stop band attenuation (Referred to through Level)	
DC to 1850 MHz	21 dB min.
1850 to 1895 MHz	18 dB min.
1895 to 1910 MHz	10 dB min.
2070 to 2400 MHz	30 dB min.
2400 to 3000 MHz	23 dB min.
3000 to 4000 MHz	13 dB min.
4000 to 6000 MHz	7 dB min.
Terminating impedance	50 Ω
Operating temperature range	-30 °C to +85 °C

■ Package Outlines [Dimensions in mm]



■ Footprint [Dimensions in mm]

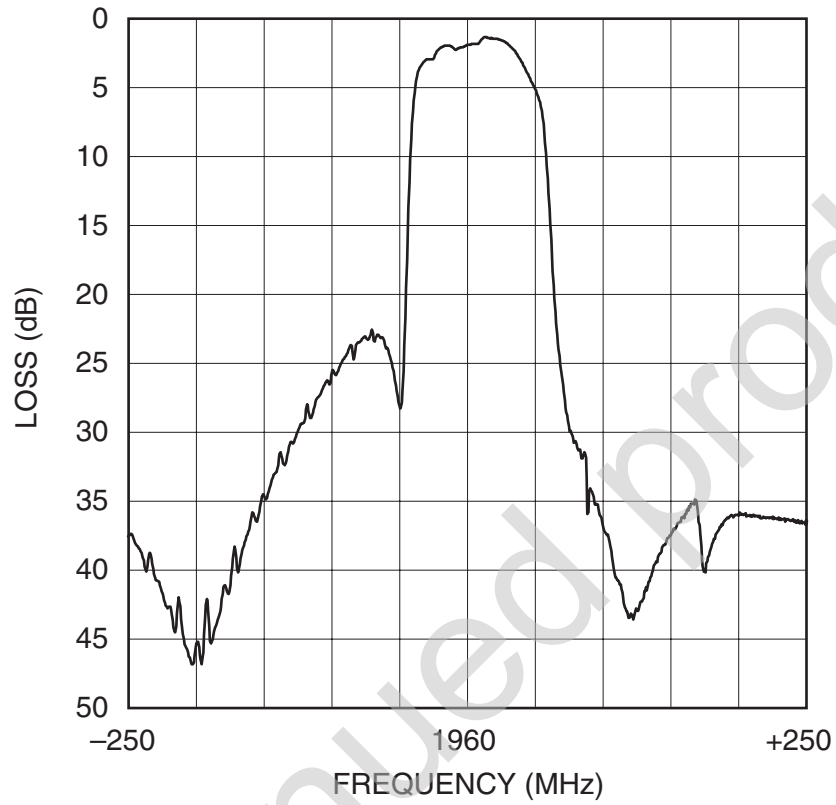


Surface Acoustic Wave Filter (SAW Filter)

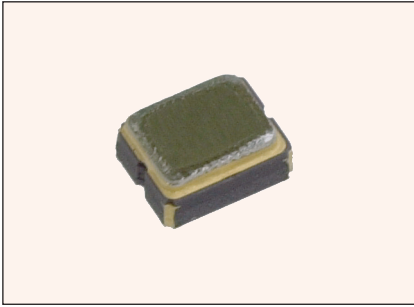
RF Filter for Cellular Phone
 PCS system (Rx)

TQS-943AA-7R
 1960 MHz

■ Electrical Data



Surface Acoustic Wave Filter (SAW Filter)



TQS-944AA-7R

■ Features

- Ultra miniature size : 2.5(W) x 2.0(D) x 1.1(H)mm
- High attenuation

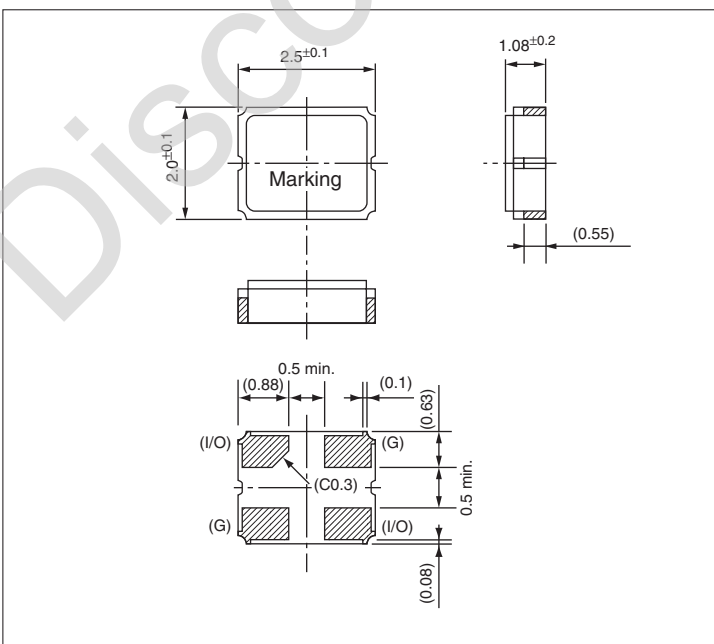
■ Application

- RF filter for Cellular Phone W-CDMA system (Rx)

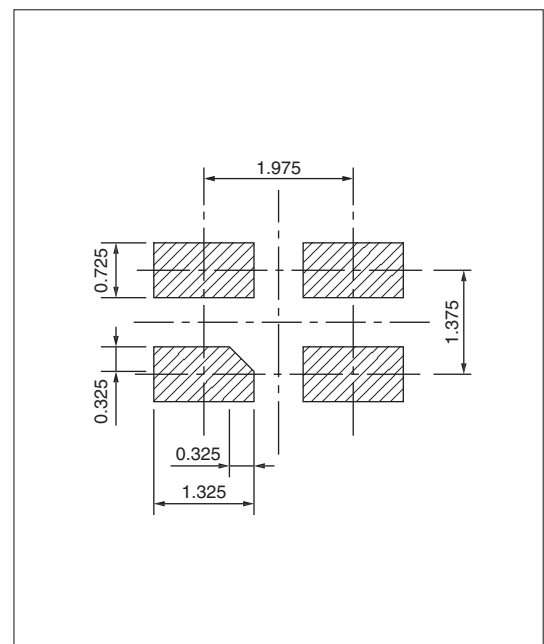
■ Specifications

Type	TQS-944AA-7R
Nominal frequency	2140 MHz
Pass band	2110 to 2170 MHz
Insertion loss	3.2 dB max.
Pass band ripple	1.5 dB max.
VSWR	2.5 max.
Stop band attenuation (Referred to through Level)	
DC to 1920 MHz	20 dB min.
1920 to 1980 MHz	33 dB min.
2015 to 2075 MHz	5 dB min.
2205 to 2265 MHz	5 dB min.
2265 to 3000 MHz	30 dB min.
3000 to 4000 MHz	20 dB min.
4000 to 6000 MHz	6 dB min.
Terminating impedance	50 Ω
Operating temperature range	-20 °C to +85 °C

■ Package Outlines [Dimensions in mm]



■ Footprint [Dimensions in mm]

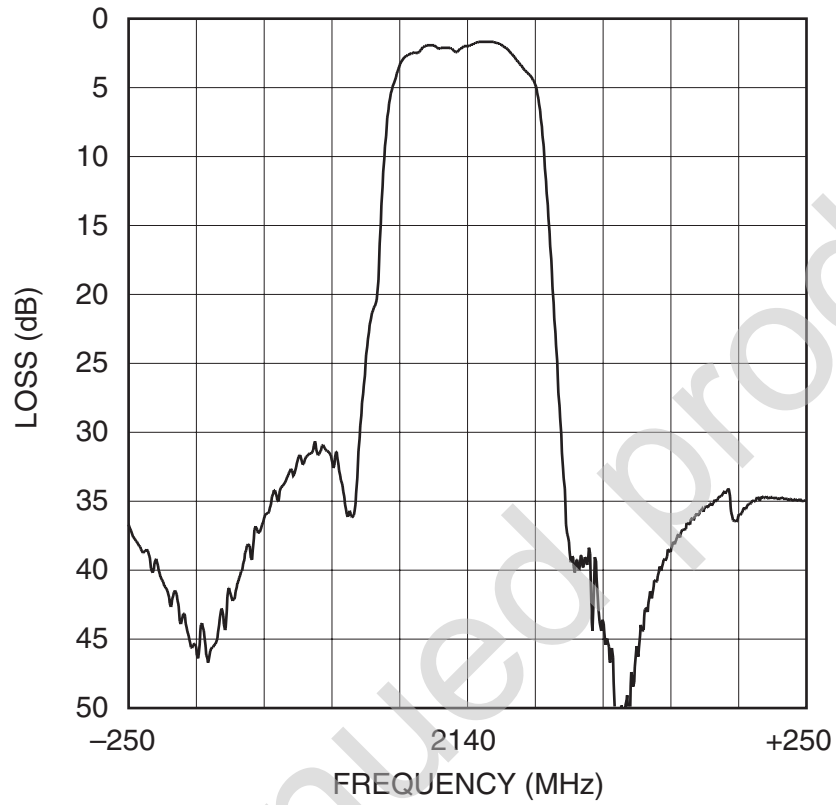


Surface Acoustic Wave Filter (SAW Filter)

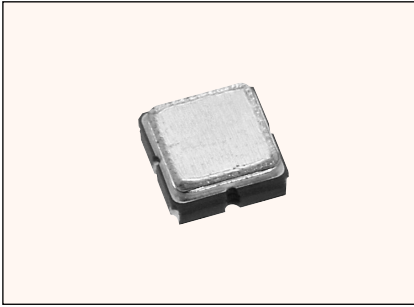
RF Filter for Cellular Phone
W-CDMA system (Rx)

TQS-944AA-7R
2140 MHz

■ Electrical Data



Surface Acoustic Wave Filter (SAW Filter)



TQS-945AA-7R

Features

- Miniature size : 3.0(W) x 3.0(D) x 1.1(H)mm
- High selectivity

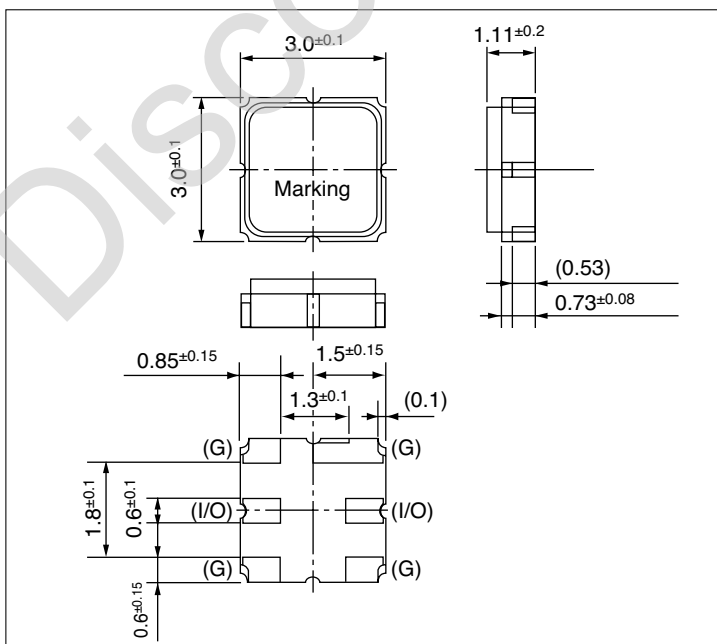
Application

- RF filter for GPS

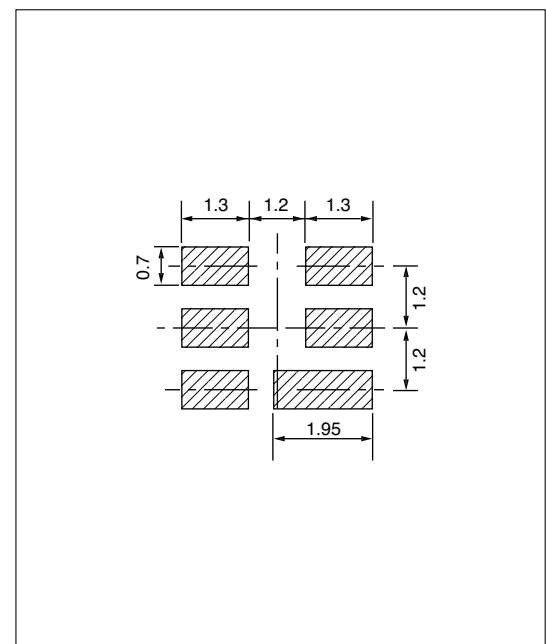
Specifications

Type	TQS-945AA-7R
Nominal frequency	1575.42 MHz
Pass band	1573.42 to 1577.42 MHz
Insertion loss	1.8 dB max.
Pass band ripple	0.6 dB max.
VSWR	2.0 max.
Stop band attenuation (Referred to through Level)	
832 to 925 MHz	34 dB min.
1355.42 MHz	38 dB min.
1475.42 MHz	36 dB min.
1525.42 MHz	30 dB min.
1625.42 MHz	30 dB min.
1675.42 MHz	40 dB min.
Terminating impedance	50 Ω
Operating temperature range	-30 °C to +85 °C

Package Outlines [Dimensions in mm]



Footprint [Dimensions in mm]

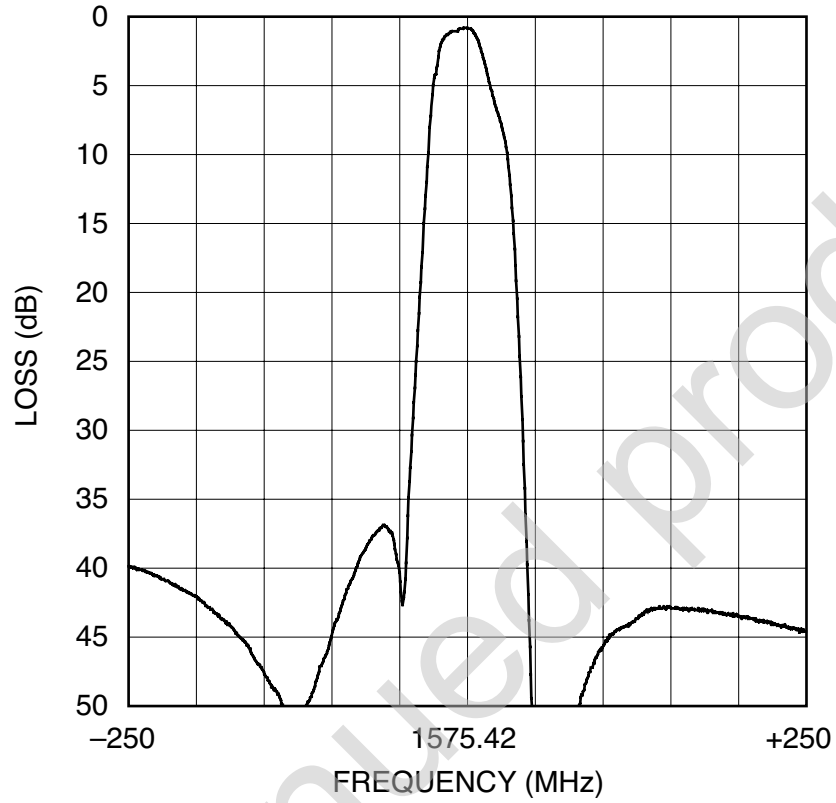


Surface Acoustic Wave Filter (SAW Filter)

RF Filter
for GPS

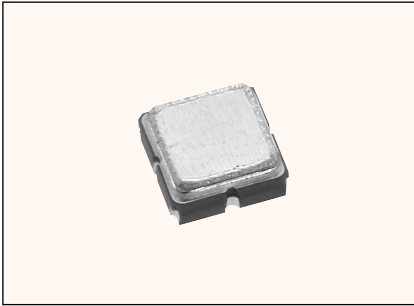
TQS-945AA-7R
1575.42 MHz

■ Electrical Data



Discontinued product

Surface Acoustic Wave Filter (SAW Filter)



TQS-946AA-7R

Features

- Miniature size : 3.0(W) x 3.0(D) x 1.1(H)mm
- High selectivity
- Split-Band

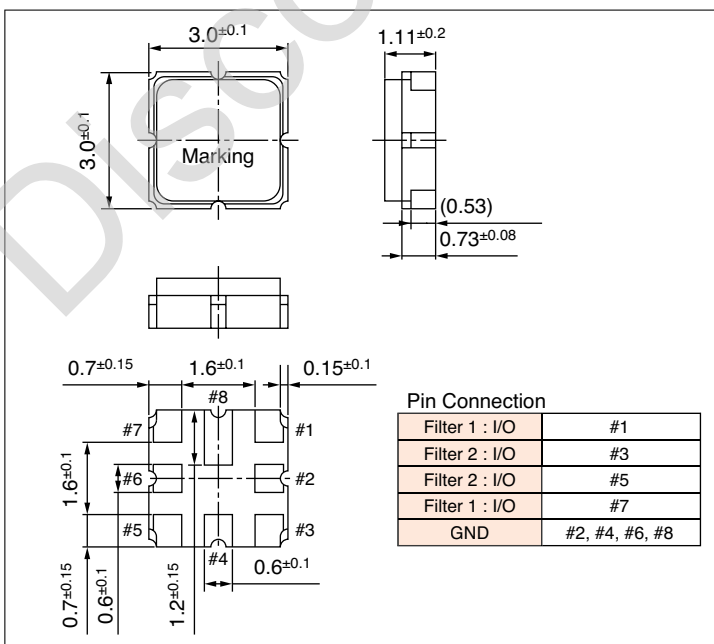
Application

- RF Filter for Cellular Phone PCS system (Tx)

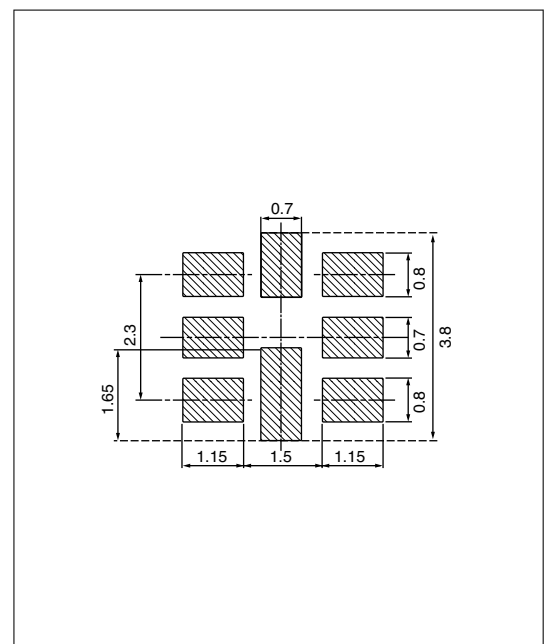
Specifications

Type	TQS-946AA-7R	
Nominal frequency	1867 MHz : Filter 1	1892 MHz : Filter 2
Pass band	1850 to 1885 MHz	1875 to 1910 MHz
Insertion loss	3.0 dB max.	3.0 dB max.
Pass band ripple	1.5 dB max.	1.5 dB max.
VSWR	2.0 max.	2.0 max.
Stop band attenuation (Referred to through Level)	DC to 1570 MHz : 24 dB min. 1570 to 1770 MHz : 30 dB min. 1770 to 1805 MHz : 20 dB min. 1930 to 1965 MHz : 35 dB min. 1965 to 2500 MHz : 35 dB min. 2500 to 4000 MHz : 18 dB min. 4000 to 6000 MHz : 4 dB min.	DC to 1570 MHz : 24 dB min. 1570 to 1795 MHz : 30 dB min. 1795 to 1830 MHz : 20 dB min. 1955 to 1990 MHz : 35 dB min. 1990 to 2500 MHz : 35 dB min. 2500 to 4000 MHz : 18 dB min. 4000 to 6000 MHz : 4 dB min.
Terminating impedance	Input : 50 Ω , Output : 50 Ω	Input : 50 Ω , Output : 50 Ω
Operating temperature range)	-30 °C to +85 °C	

Package Outlines [Dimensions in mm]



Footprint [Dimensions in mm]



Surface Acoustic Wave Filter (SAW Filter)

RF Filter (Split-Band) for Cellular Phone
 PCS system (Tx)

TQS-946AA-7R-7R
 1867 / 1892 MHz

■ Electrical Data

