



# TMX AT11

SAW Bandpass Filter – WCDMA Tx - RF  
Preliminary Specification (Rev 1)

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## SAW Bandpass Filter – WCDMA Tx - RF

Preliminary Specification (Rev.1)- RF

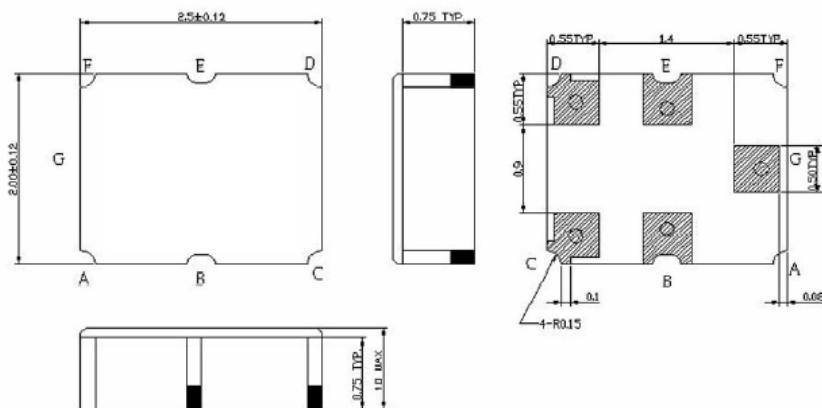
February 3<sup>rd</sup>, 2006

### Features

- ❑ Tx SAW Filter for WCDMA
- ❑ 1950 MHz Center Frequency
- ❑ 60 MHz useable Passband
- ❑ 200 Ohms Balanced Input / 50 Ohms Single Output Configuration
- ❑ Ceramic package for Surface Mounted Technology

### Package Drawing & Pin out

The product is in conformance with the European RoHs Regulation 2002/95.



### Pin Configuration

Input	C, D
Output	G
Case ground	B, E

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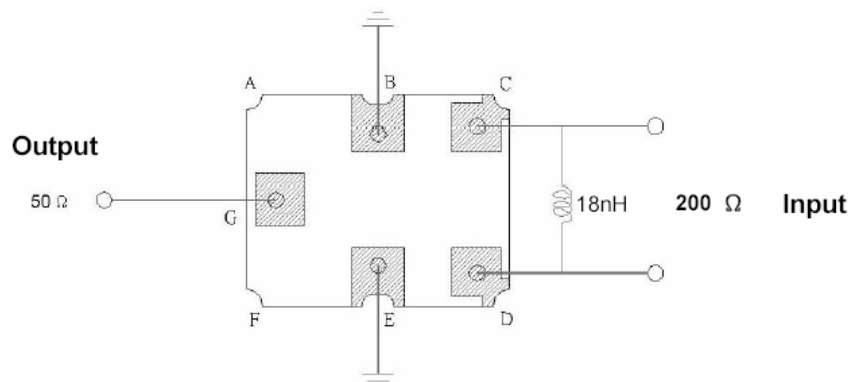
February 3<sup>rd</sup>, 2006

### Technical Characteristics

Reference Temperature : +25°C

Electrical Parameters	Unit	Minimum	Typical <sup>(1)</sup>	Maximum
Source Impedance (balanced)	Ohms	-	200	-
Load Impedance (single)	Ohms	-	50	-
Center Frequency fc	MHz	-	1950	-
Bandwidth at -3dB	MHz	60	-	-
<b>Absolute Attenuation</b>				
0 to 1805 MHz	dB	20	30	-
1805 MHz to 1860 MHz	dB	22	35	-
1860 MHz to 1880 MHz	dB	15	20	-
2110 MHz to 2170 MHz	dB	20	25	-
2170 MHz to 2670 MHz	dB	25	38	-
2680 MHz to 2740 MHz	dB	20	40	-
3840 MHz to 3960 MHz	dB	15	53	-
5760 MHz to 5940 MHz	dB	15	44	-
<b>Symmetry in band (referenced to the matched operating condition)</b>				
$ S_{21}  /  S_{31} $ within 1920 MHz – 1980 MHz	dB	-2.2	0	2.2
$\angle(S_{21}) - \angle(S_{31}) + 180^\circ$ within 1920MHz-1980MHz	deg	-18	0	18
Insertion Loss within 1920 MHz – 1980 MHz	dB	-	2.6	4.0
Amplitude ripple within 1920 MHz – 1980 MHz	dB	-	0.4	1.8
Input VSWR within 1920 MHz – 1980 MHz		-	1.8	2.4
Output VSWR within 1920 MHz – 1980 MHz		-	2.0	2.4

### Matching Network



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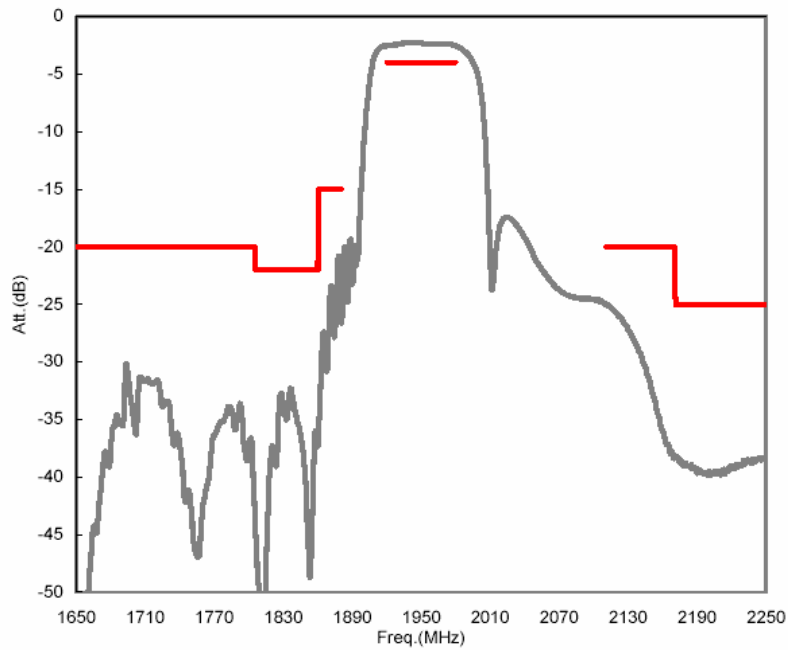
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### Nominal Frequency Response (Measurements)

Frequency Response



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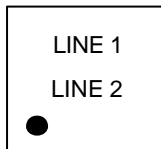
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February 3<sup>rd</sup>, 2006

### Maximum Ratings

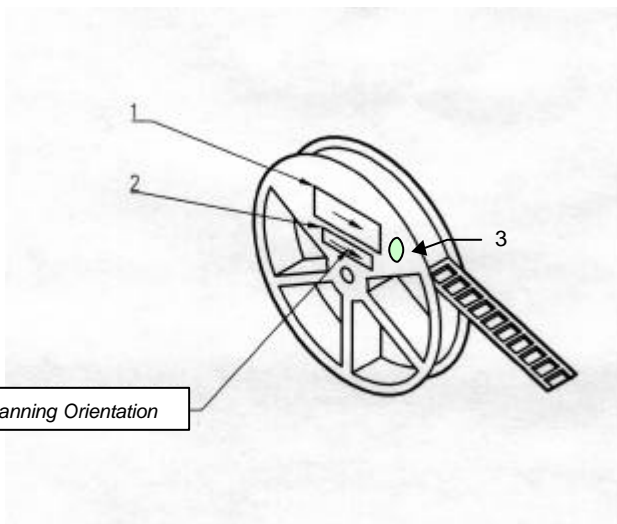
Storage Temperature Range	°C	[-10°C ; +85°C]
Operating temperature	°C	[-40°C ; +85°C]

### Marking



Line 1: "P C" with P for the code product identification and C for the partner identifier  
 Line 2: "Y W" with Y for the last digit of the year and W for the week code (A to Z for the week 1 to 26 and a to z for the week 27 to 52).

### Packaging



- 1 – Temex Label
- 2 – ESD Prevention Label
- 3 – Pb Free Label