

# TMX ET03

SAW Bandpass Filter - RF  
*Preliminary Specification (Rev 1)*

---

▣ Features .....	P01
▣ Package Drawing & Pin out .....	P01
▣ Technical Characteristics .....	P02
▣ Matching Network .....	P02
▣ Nominal Response .....	P03
▣ Maximum Ratings .....	P04
▣ Marking & Packaging .....	P04

# TMX ET03

## SAW Bandpass Filter – Remote Control - RF

Preliminary Specification (Rev 1)

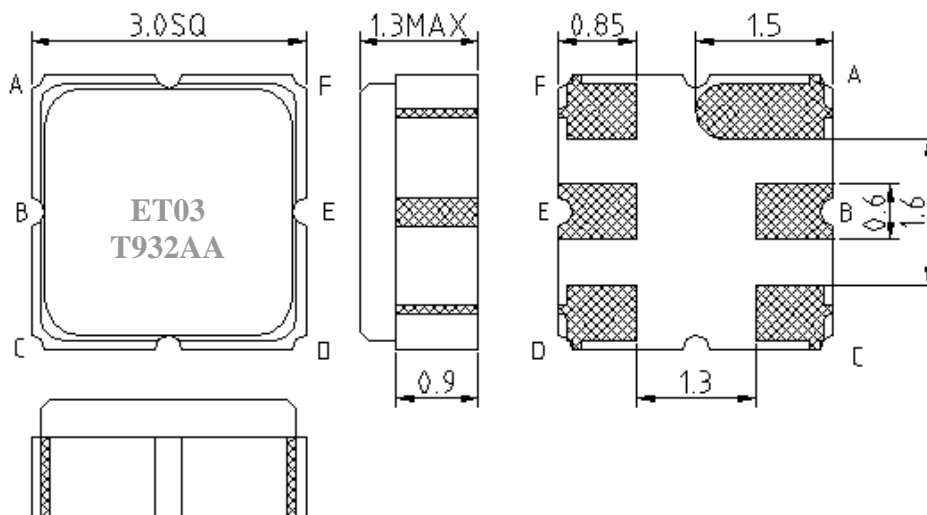
September 30<sup>th</sup>, 2010

### Features

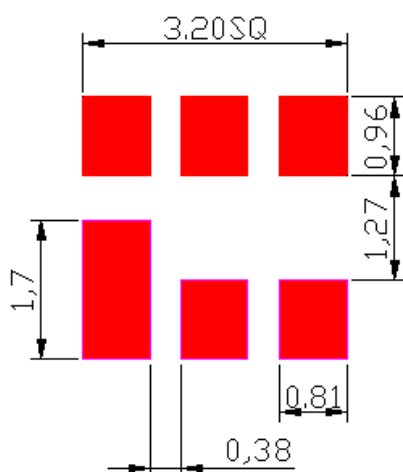
- ❑ RF SAW Filter
- ❑ 448 MHz Center Frequency
- ❑ Ceramic package for Surface Mounted Technology
- ❑ RoHS Compliant

### Package Drawing & Pin out

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



### PCB Footprint



### Pin Configuration

Input	B
Output	E
Case Ground	A, C, D, F

# TMX ET03

## SAW Bandpass Filter – Remote Control - RF

Preliminary Specification (Rev 1)

September 30<sup>th</sup>, 2010

### Technical Characteristics

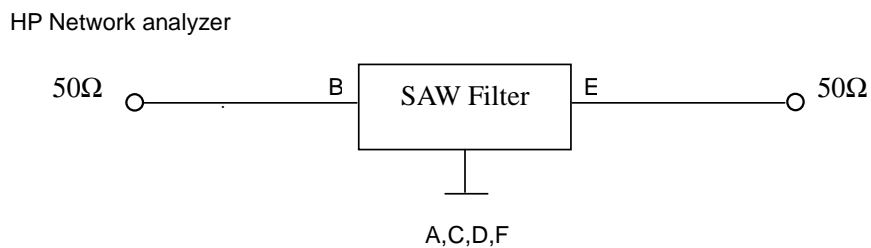
Reference Temperature : +25°C

Electrical Parameters	Unit	Minimum	Typical <sup>(1)</sup>	Maximum
Center Frequency $f_0$	MHz		448	
Insertion Loss $f_0 \pm 1.5\text{MHz}$	dB	-	2.0	4.0
Amplitude ripple $f_0 \pm 1.5\text{MHz}$	dB	-	0.5	2.0
<b>Attenuation (Reference level from 0 dB)</b>				
From $f_0-44.3\text{ MHz}$ to $f_0-41.3\text{ MHz}$	dB	45	51	
From $f_0+41.3\text{ MHz}$ to $f_0+44.3\text{ MHz}$	dB	45	49	
Source Impedance (Single ended)	Ohms		50 <sup>(2)</sup>	
Load Impedance (Single ended)	Ohms		50 <sup>(2)</sup>	
<b>Package type &amp; size</b>				
Length x Width	mm		3.0 x 3.0	
Height	mm			1.3
<b>Pin Out</b>				
Input	B	Output	E	
Case Ground	A,C,D,F	To be grounded	A,C,D,F	

**Notes :**

- (1) Typical values are nominal performances at room temperature
- (2) Not external matching circuit is required

### Measurement Circuit



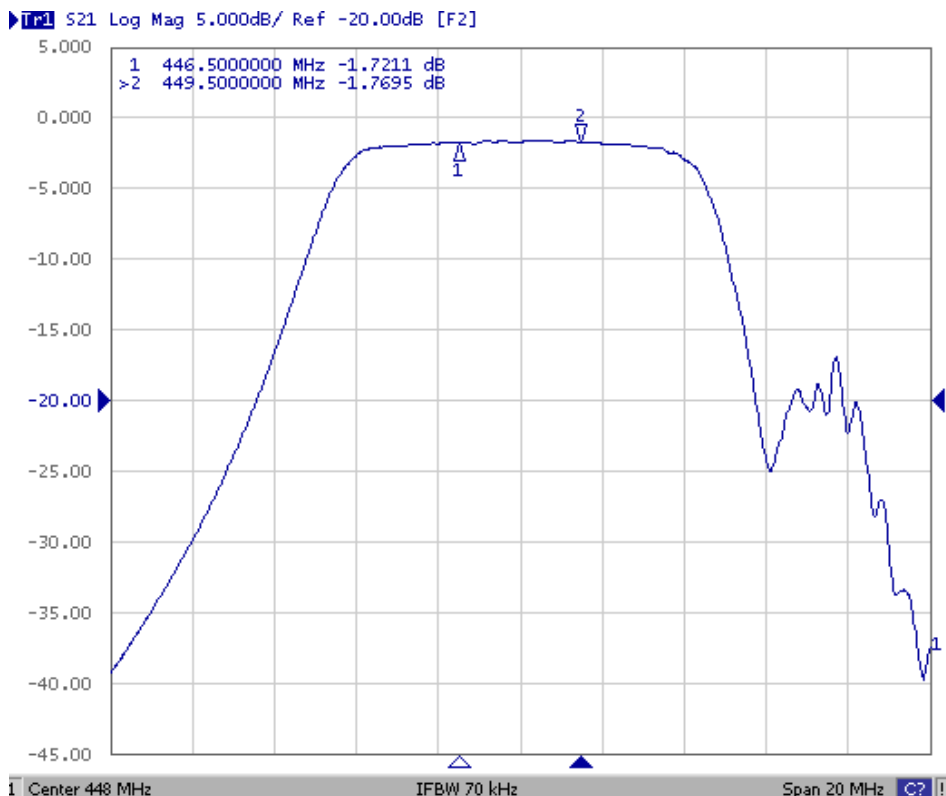
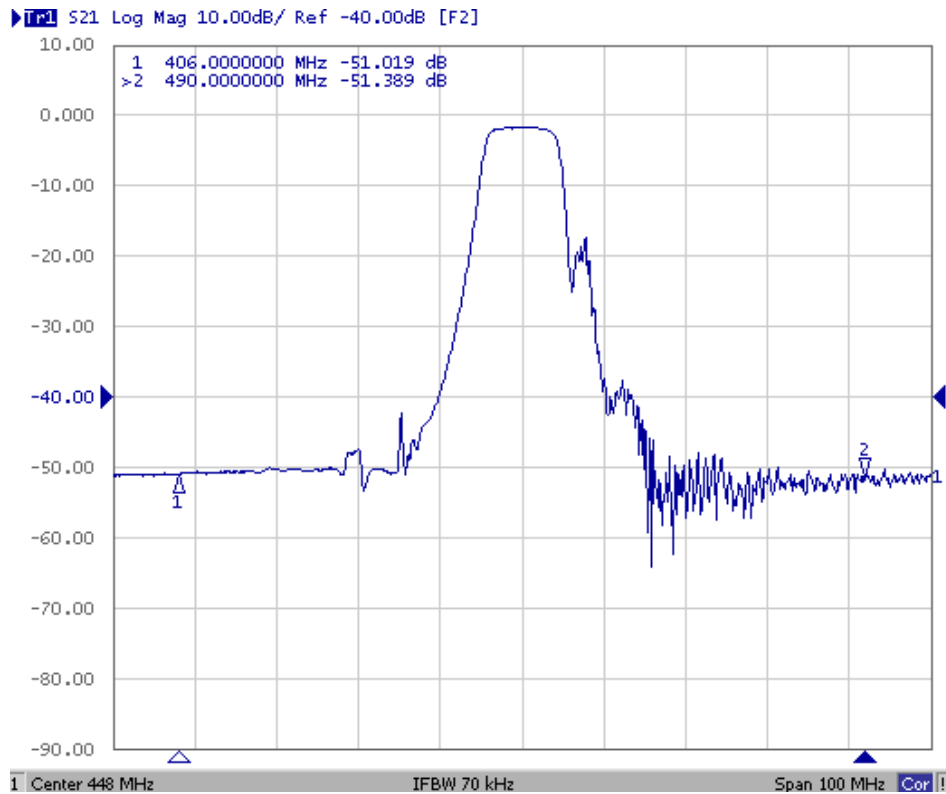
# TMX ET03

## SAW Bandpass Filter – Remote Control - RF

Preliminary Specification (Rev 1)

September 30<sup>th</sup>, 2010

### Nominal Frequency Response (Measurements)



# TMX ET03

## SAW Bandpass Filter – Remote Control - RF

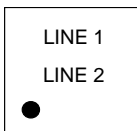
Preliminary Specification (Rev 1)

September 30<sup>th</sup>, 2010

### Maximum Ratings

Storage Temperature Range	°C	[-30°C ; +85°C]
Operating temperature	°C	[-10°C ; +60°C]
DC voltage	V	3
RF Power Dissipation	dBm	10

### Marking



Line 1: "NNNN" is the reference to Temex Part number with only the last 4 digits

Line 2: TYWWZZ is the date code as:

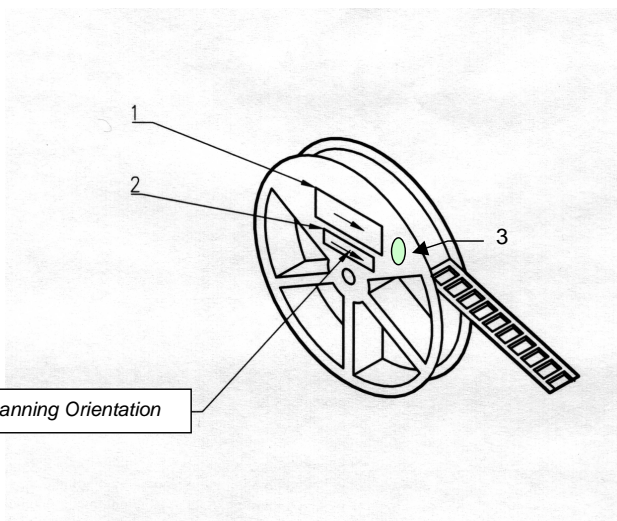
T: Partner identifier.

Y: last digit of the year.

WW: number of week in the year

ZZ: Lot number in the week (from AA to ZZ).

### Packaging



1Kpcs/reel

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