

TMX DT03

SAW Bandpass Filter -Remote Control - RF
Specification (Rev 3)

▣ Features	P01
▣ Package Drawing & Pin out	P01
▣ Technical Characteristics	P02
▣ Matching Network	P02
▣ Nominal Response	P03
▣ Maximum Ratings	P05
▣ Marking & Packaging	P05

Temexpress is
a brand name
of **rakon**

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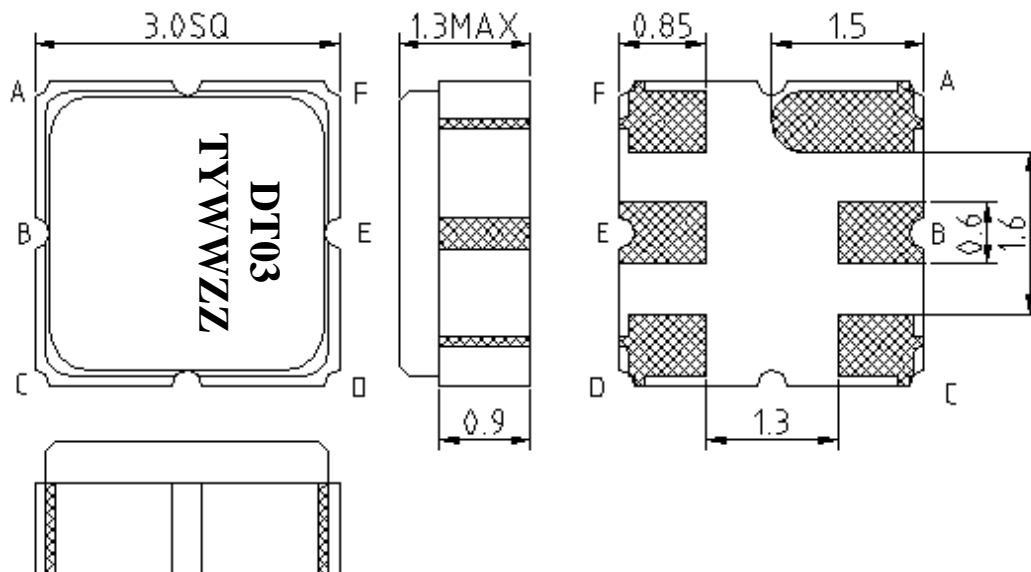
June 29th, 2022

Features

- ❑ RF SAW Filter
- ❑ 433.92 MHz Center Frequency
- ❑ Bandwidth : 1.6MHz
- ❑ 50 Ohms Single Configuration
- ❑ Ceramic package for Surface Mounted Technology

Package Drawing & Pin out

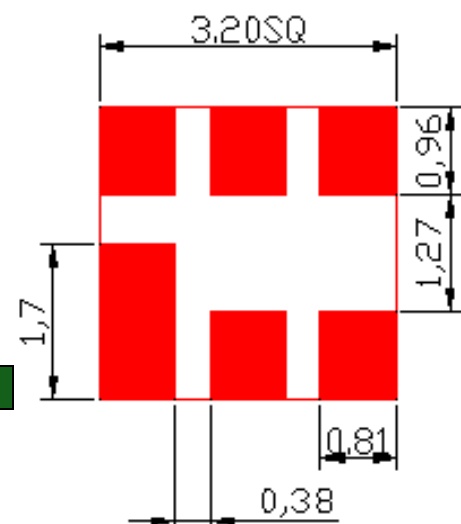
The product is in conformance with the European RoHs Directive 2015/863.



Pin Configuration

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

PCB FOOTPRINT :



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Technical Characteristics

Reference Temperature : +25°C

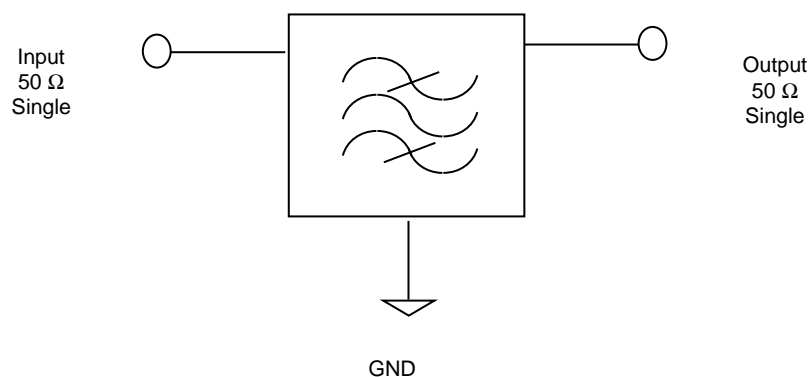
Electrical Parameters	Unit	Minimum	Typical ⁽¹⁾	Maximum
Source Impedance (Single ended)	Ohms	-	50 ⁽²⁾	-
Load Impedance (Single ended)	Ohms	-	50 ⁽²⁾	-
Center Frequency fo	MHz		433.92	
Absolute Attenuation (reference from 0 dB)				
From 10.000 MHz to 380.00 MHz		58	61	
From 380.00 MHz to 423.42 MHz	dB	46	50	-
From 443.42 MHz to 453.42 MHz	dB	25	30	-
From 453.42 MHz to 460.00 MHz	dB	35	40	-
From 460.00 MHz to 700.00 MHz	dB	50	54	
From 700.00 MHz to 1000.0 MHz	dB	42	46	
Insertion Loss in 433.12 MHz – 434.72 MHz	dB		2.2	2.9
Amplitude ripple within [433.12 MHz – 434.72 MHz]	dB		0.4	1.0
VSWR S11 S22	-		1.6	2.0
Package type & size				
Length x Width	mm		3.0 x 3.0	
Height	mm			1.3
Pin Out				
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

Matching Network

50 Ω / 50 Ω Configuration



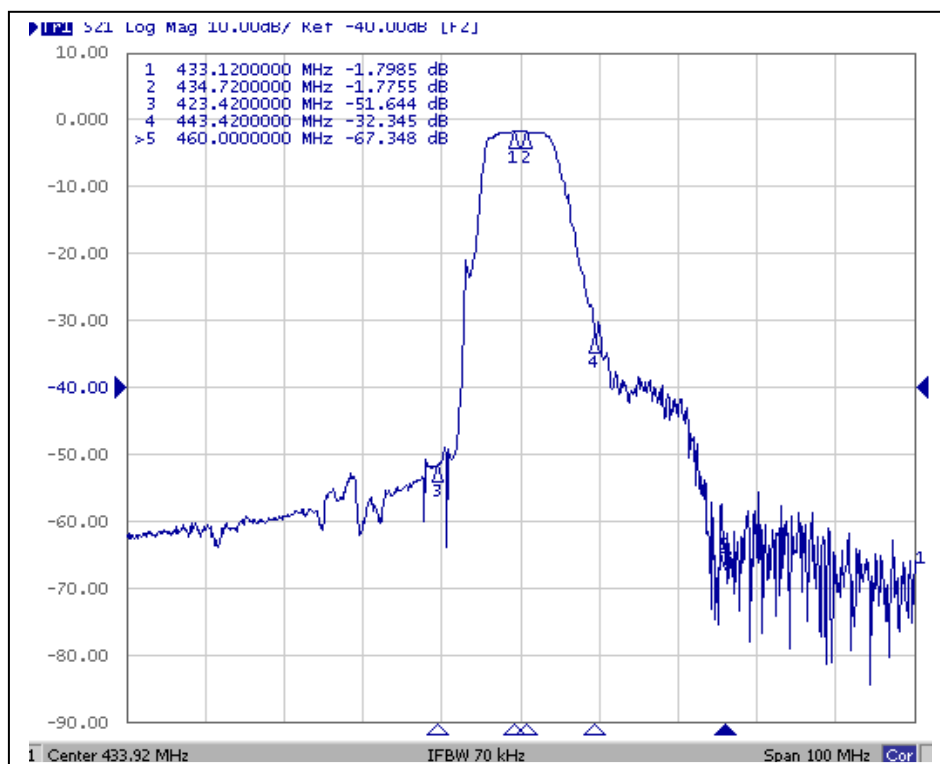
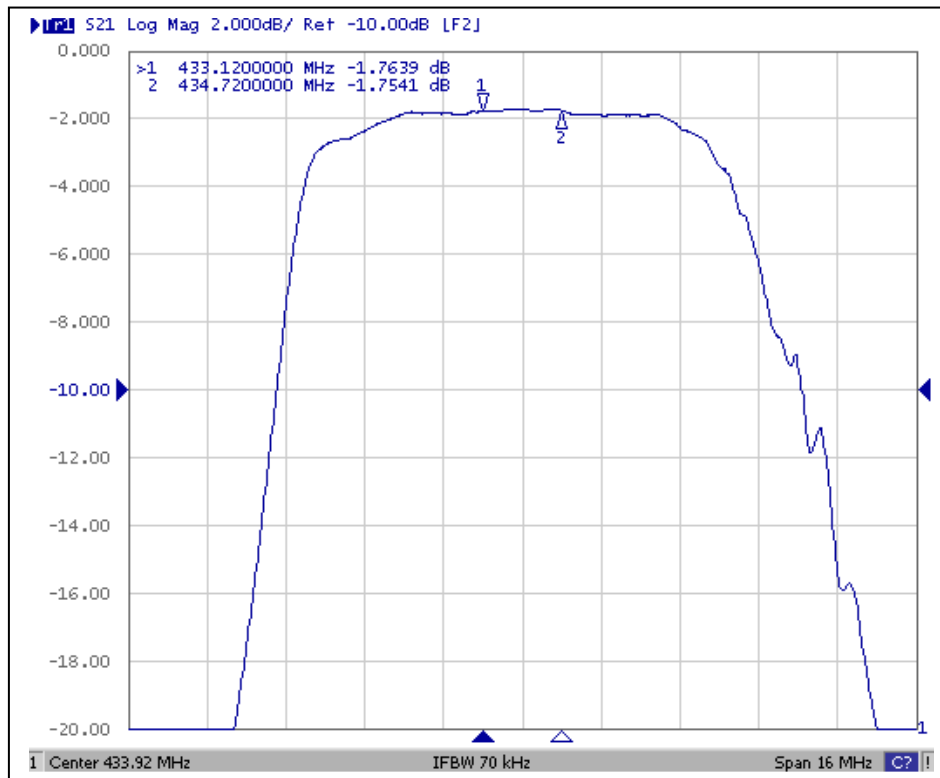
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Nominal Frequency Response (Measurements)

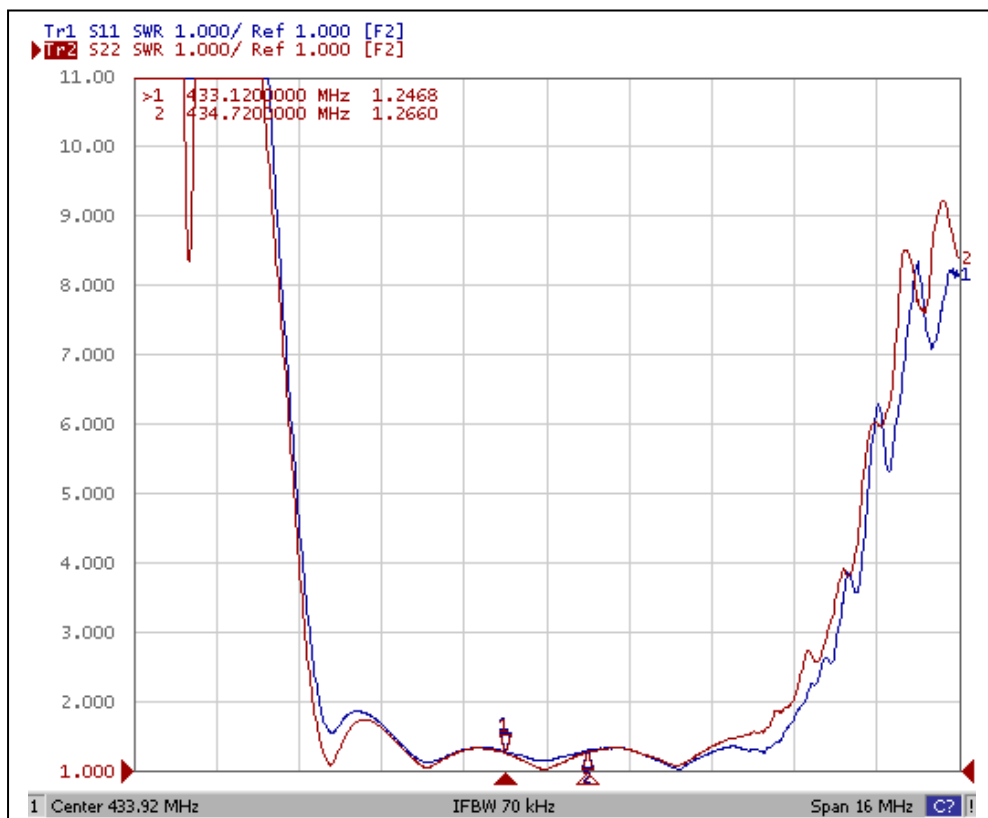
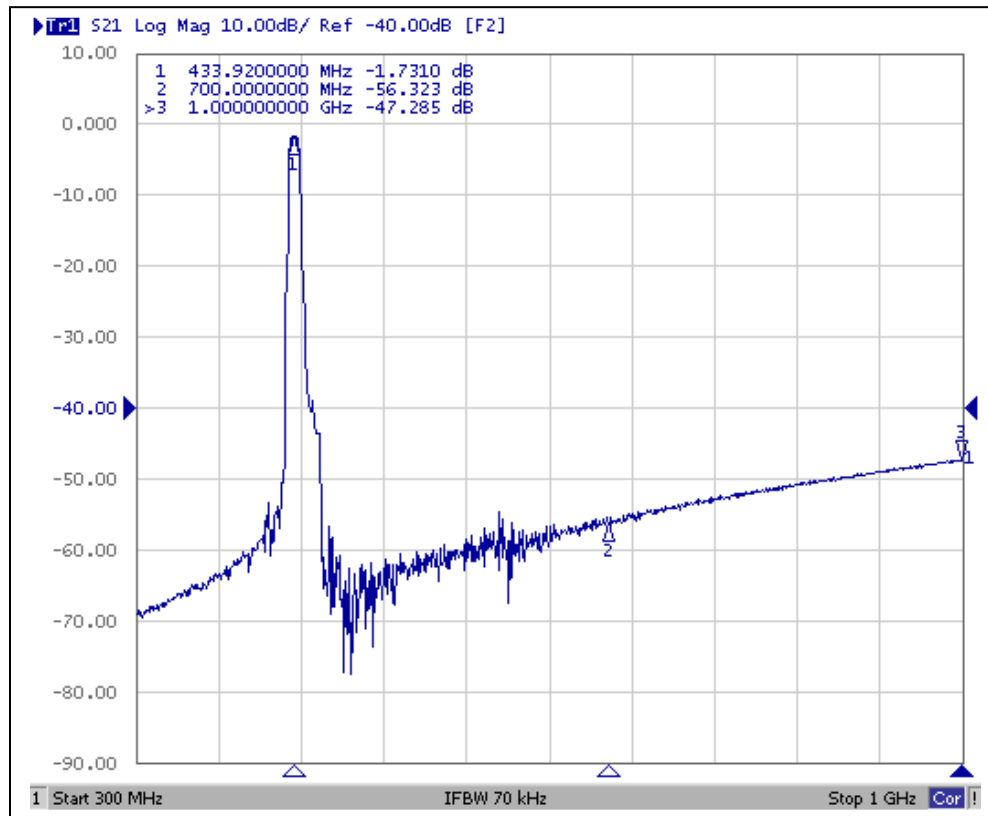


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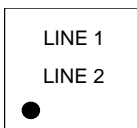
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Maximum Ratings

Storage Temperature Range	℃	[-40℃ ; +85℃]
Operating temperature	℃	[-40℃ ; +85℃]
DC voltage	V	3
RF Power Dissipation	dBm	16

Marking



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

Line 2: TYWWZZ is the date code as:

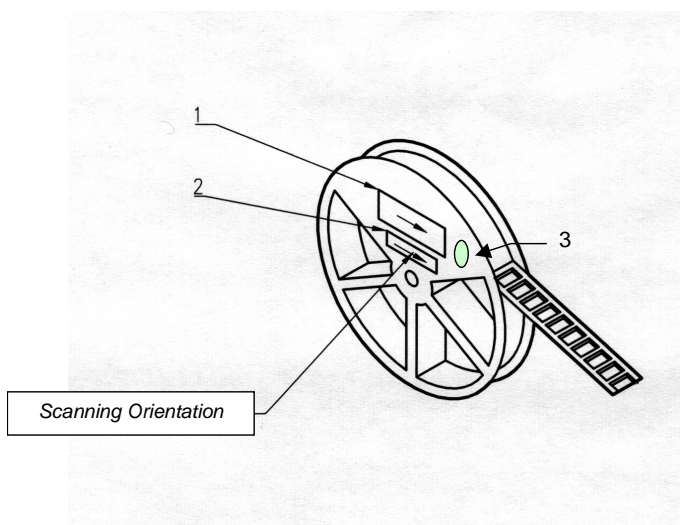
T: Partner identifier.

Y: last digit of the year.

WW: number of week in the year

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

Packaging



3Kpcs/reel

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