

TMX W416

SAW Bandpass Filter – DVB-C
Preliminary Specification (Rev-2)

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 June 10th, 2005

Reference Temperature: +25°C

Electrical Parameters	Unit	Minimum	Typical	Maximum
Source Impedance (single ended)	Ω	-	50	-
Load Impedance (balanced drive)	Ω / pF	-	2000 // 3.0	-
Center Frequency f_0 (center between 3dB points)	MHz	-	36.00	-
Relative Attenuation α_{rel}				
31.65 MHz	dB	7.0	10.0	-
40.35 MHz	dB	7.0	10.0	-
31.30 MHz	dB	22.0	29.0	-
40.70 MHz	dB	22.0	29.0	-
25.00 ... 31.00 MHz	dB	32.0	40.0	-
41.00 ... 45.00 MHz	dB	30.0	38.0	-
Insertion attenuation IL Reference level for the following data 36.00 MHz	dB	19	21.0	23
Pass bandwidth				
$\alpha_{\text{rel}} \leq 1.5\text{dB}$ $BW_{1.5\text{dB}}$	MHz	-	7.8	-
$\alpha_{\text{rel}} \leq 3\text{dB}$ $BW_{3\text{dB}}$	MHz	-	8.1	-
$\alpha_{\text{rel}} \leq 15\text{dB}$ $BW_{15\text{dB}}$	MHz	-	8.9	-
$\alpha_{\text{rel}} \leq 30\text{dB}$ $BW_{30\text{dB}}$	MHz	-	9.4	-
Reflected wave Signal Suppression 1.2 μs ...6.0 μs after main pulse (test pulse 250ns, carrier frequency 36MHz)	dB	42	52	-
Feed through Signal Suppression 1.2 μs ...1.1 μs before main pulse (test pulse 250ns, carrier frequency 36MHz)	dB	-	50	-
Group Delay (p-p) 32.35MHz...39.65MHz	ns	-	50	-
Impedance at 36 MHz				
Input	$\text{k}\Omega // \text{pF}$	-	2.8 // 15.5	-
Output	$\text{k}\Omega // \text{pF}$	-	2.4 // 4.4	-
Temperature coefficient of frequency TC_f	ppm/K	-	-72	-
Package type	SIP5D			

Maximum Ratings

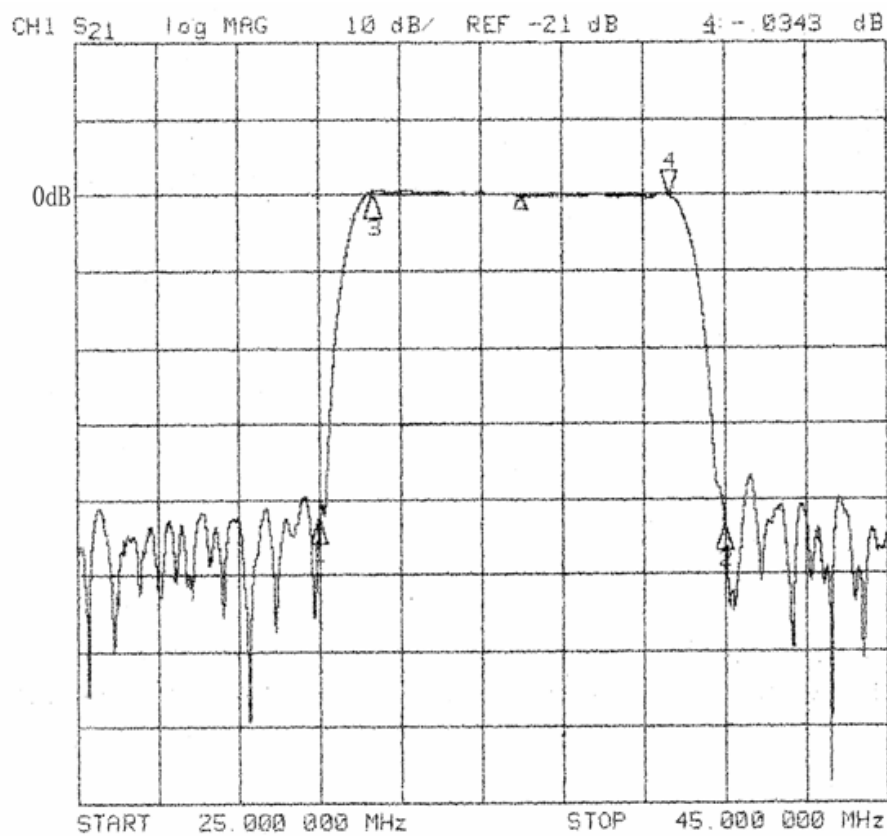
Rating	Unit	Value
Operable Temperature Range	T_A	-10 to +60 °C
Storage Temperature Range	T_{stg}	-40 to +70 °C
DC Voltage (between any terminals)		12 V
AC Voltage (between any terminals)	V_{PP}	10 V

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TYPICAL S21 RESPONSE

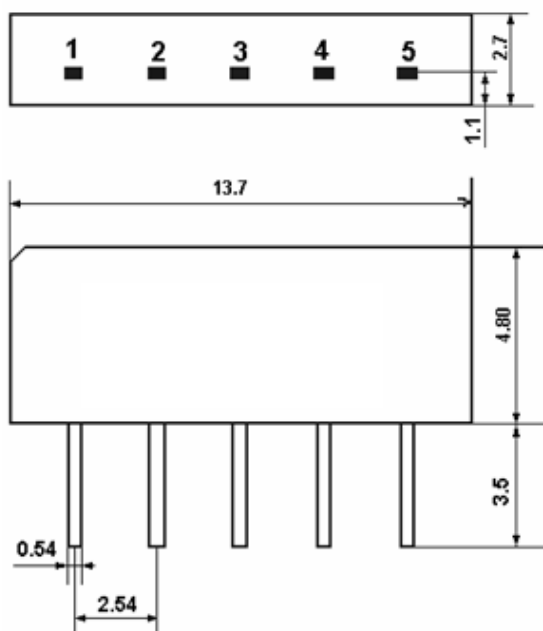


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PACKAGE DRAWING



Unit: mm

Pin:

1. Input
2. Input – ground
3. Ground – carrier
4. Output
5. Output