



TMX W413

SAW Bandpass Filter – Europe DVB-C
Specification (Rev-4)

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Reference Temperature : +25°C

Electrical Parameters	Unit	Minimum	Typical	Maximum
Source Impedance (Single ended)	Ω	-	50	-
Load Impedance (balanced drive)	$\Omega // \text{pF}$	-	2000 // 3.0	-
Center Frequency fo (center between 3dB points)	MHz	-	36.125	-
Relative Attenuation α_{rel}				
31.30 MHz	dB	21.5	24.5	-
31.65 MHz	dB	7	8.7	-
40.35 MHz	dB	7	10.7	-
40.70 MHz	dB	21	27	-
25.00 ... 31.00 MHz	dB	33	38	-
41.00 ... 45.00 MHz	dB	31	36	-
Insertion attenuation IL Reference level for the following data 36.125 MHz	dB	21.1	22.6	24.1
Pass bandwidth				
$\alpha_{rel} \leq 1.5\text{dB}$ BW _{1.5dB}	MHz	-	7.8	-
$\alpha_{rel} \leq 3\text{dB}$ BW _{3dB}	MHz	-	8.1	-
$\alpha_{rel} \leq 15\text{dB}$ BW _{15dB}	MHz	-	9.0	-
$\alpha_{rel} \leq 30\text{dB}$ BW _{30dB}	MHz	-	9.5	-
Amplitude Ripple 32.65...39.60MHz	dB	-	1.0	-
Reflected Wave Signal Suppression 1.2 μs ...6.0 μs after the main pulse (test pulse 250ns, carrier frequency 36.125MHz)	dB	42	46	-
Feed Through Signal Suppression 1.2 μs ...1.1 μs before the main pulse (test pulse 250ns, carrier frequency 36.125MHz)	dB	50	56	-
Group Delay ripple (p-p) Aperture 62.5kHz 32.35.....39.65 MHz	ns	-	40	-
Temperature coefficient of frequency TC _f	ppm/K	-	- 72	-
Impedance at 36.125MHz				
Input	k $\Omega // \text{pF}$	-	4.0 // 11.2	-
Output	k $\Omega // \text{pF}$	-	3.5 // 3.0	-
Package type	SIP5D			

Maximum Ratings

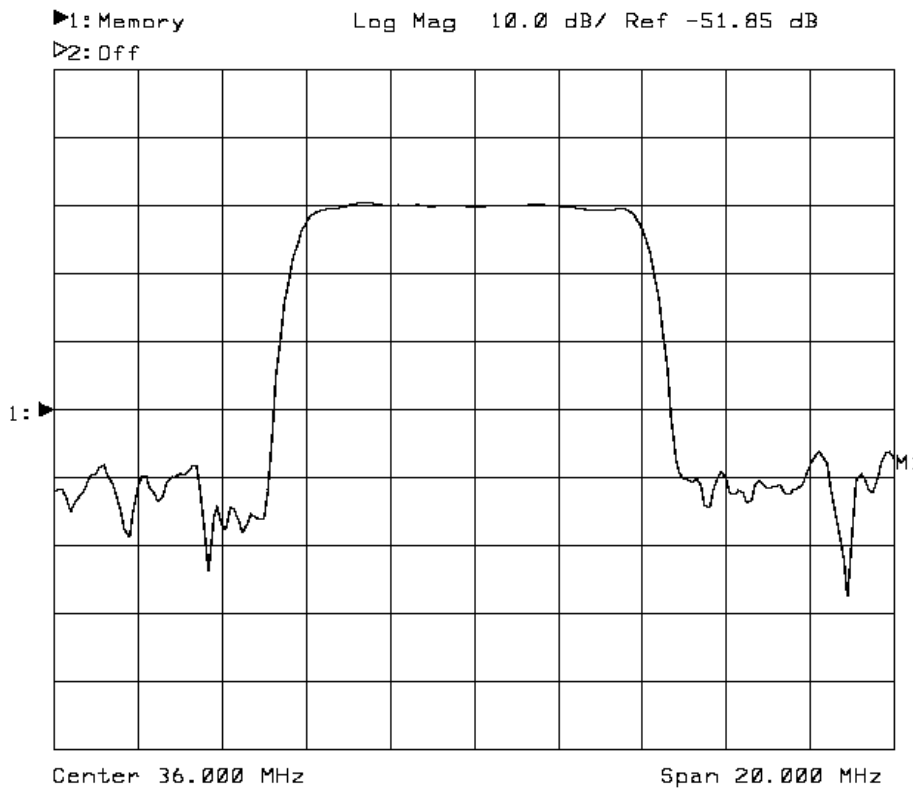
Rating	Unit	Value
Operable Temperature Range	T _A	-25 to +65 °C
Storage Temperature Range	T _{stg}	-40 to +85 °C
DC voltage (Between any terminals)		12 V
AC voltage (Between any terminals)		10 V

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TYPICAL S21 RESPONSE

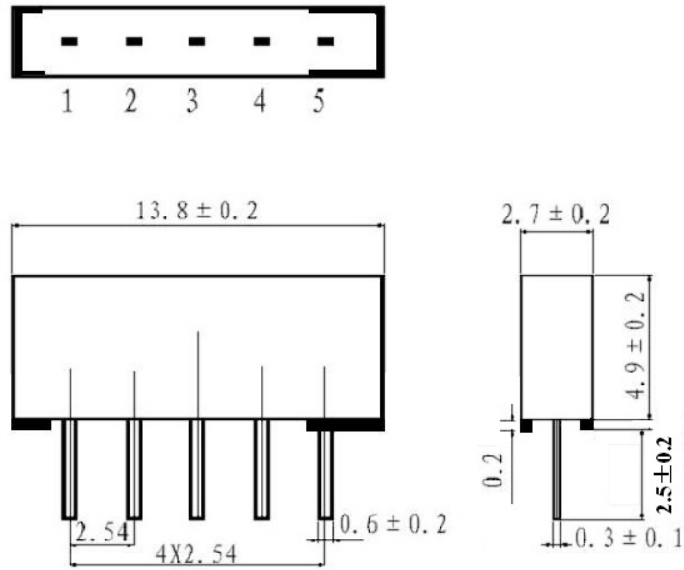


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PACKAGE DRAWING



Pin No.	Functions
1.	Input
2.	Input- Ground
3.	Ground
4.	Output
5.	Output