TEMEX

TMX U382

SAW Bandpass Filter – Europe DVB-C
Specification (Rev-1)

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January 20 th, 2005

Operating Temperature range : +25°c

Electrical Parameters	Unit	Minimum	Typical	Maximum
Source Impedance (single ended)	Ω	-	50	-
Load Impedance (balanced drive)	Ω / pF	-	2000 / 3	-
Center Frequency fo (center between 3dB points)	MHz	-	36.125	-
Relative Attenuation α_{rel}				
33.59 MHz	dB	-0.4	0.8	2.0
38.65 MHz	dB	-1.0	0.2	1.4
33.12 MHz	dB	1.8	3.0	4.2
39.12 MHz	dB	1.1	2.3	3.5
Lower sidelobe				
25.00 … 32.12 MHz	dB	25	30	-
Upper sidelobe				
40.12 … 41.42 MHz	dB	26	33	-
41.42 … 45.00 MHz	dB	28	35	-
Insertion attenuation IL Reference level for the following data 36.13 MHz	dB	16	17.5	19
Pass bandwidth $\alpha_{rel} \leq$ 3dB BW_{3dB} $\alpha_{rel} \leq$ 30dB BW_{30dB}	MHz MHZ	5.8 7.4	6.0 7.6	6.2 7.8
Reflected wave signal suppression 1.3µs … 6.0µs after main pulse (test pulse 250ns, carrier frequency 36.13 MHz)	dB	42.0	52.0	-
Feedthrough signal suppression 1.3µs … 1.2µs before main pulse (test pulse 250ns, carrier frequency 36.13 MHz)	dB	50.0	56.0	-
Group delay ripple (p-p) $\Delta \tau$ Aperture 50 kHz 32.12 … 39.12 MHz	ns	-	40	-
Temperature coefficient of frequency TC_f	ppm/K	-	-72	-
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)	V_{DC}	12	V
AC Voltage (between any terminals)	V_{PP}	10	V

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TEMEX reserves the right to modify herein specifications and informations at any time when necessary to provide optimum performance and cost.

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TYPICAL S21 RESPONSE

References

CENTER FREQUENCY	= 36.13	MHz
LOSS REFERENCE		dB
DELAY REFERENCE	= 1.2	µs
PHASE REFERENCE	= 52.16	deg

Scales

SCALE_FREQUENCY	= 1	MHz/div
SCALE_AMPLITUDE	= 5	dB/div
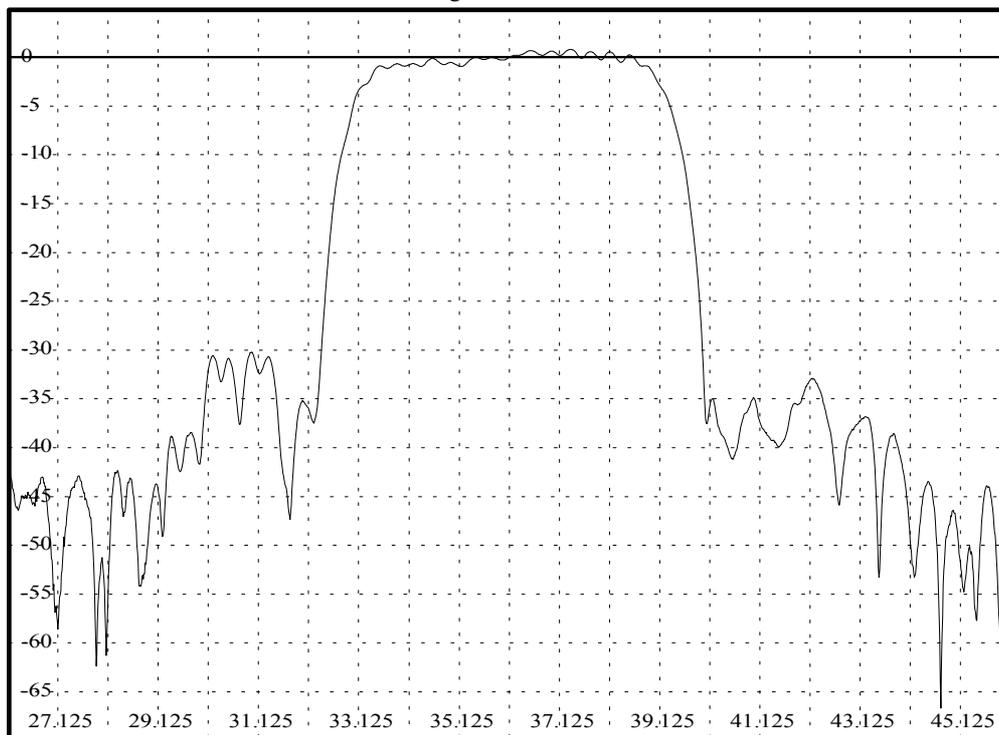
PACKAGE DRAWING

Package Dimension

14.5
2.8
5.8
4.0
0.54
4× 2.54
0.3
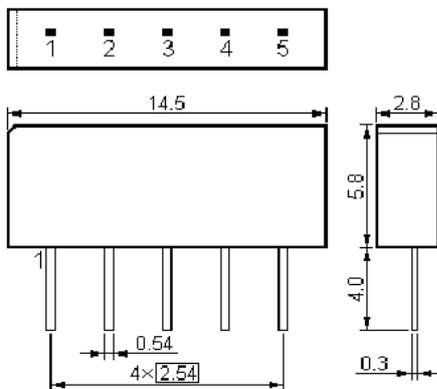
Pin Configuration

1 Input
2 Input - ground
3 Chip carrier - ground
4 Output
5 Output

Plastic Package **SIP5D**
Unit: mm

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