

# F074LSL

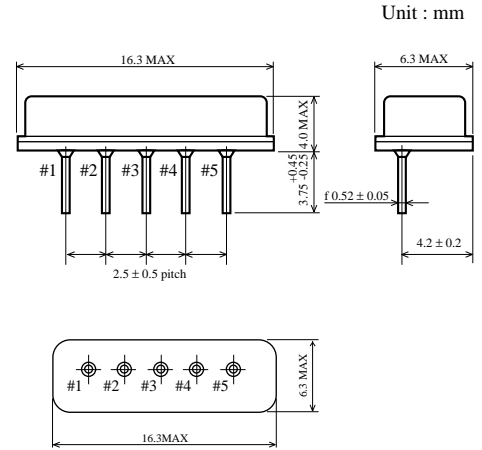
- APPLICATION ..... TV-IF FILTER
- SYSTEM ..... B, G
- CARRIER FREQUENCY ..... 38.9 MHz

## ELECTRICAL CHARACTERISTICS

Parameters	Conditions	Min.	Typical	Max.	Unit
Insertion Loss	fp-1.5 (37.4 MHz)	-	17.3	-	dB
Relative level*	fp-8 (30.9 MHz)	-	-42	-35	dB
	fp-7.5 (31.4 MHz)	-	-42	-35	dB
	fp-7 (31.9 MHz)	-	-49	-39	dB
	fp-6.5 (32.4 MHz)	-	-46	-35	dB
	fp-5.5 (33.4 MHz)	-21.5	-20.0	-18.5	dB
	fp-4.43 (34.47 MHz)	- 3.5	-2.0	- 0.5	dB
	fp-1.5 (37.4 MHz)	-	0	-	dB
	fp (38.9 MHz)	- 7.5	-6.0	- 4.5	dB
	fp-1.25 (40.15 MHz)	-	-40	-30	dB
	fp+1.5 (40.4 MHz)	-	-47	-35	dB
Outband Rejection	25.0 to 32.4	-	-39	-32	dB
	40.4 to 45.0	-	-40	-32	dB
Amplitude ripple within pass band (p-p)		-	0.2	0.8	ns
Group Delay**	fp-4.43 (34.47 MHz)	-	50	-	ns
	fp-2 (36.9 MHz)	-	-60	-	ns
	fp (38.9 MHz)	-	0	-	ns
Ripple (p-p)	34.47 to 38.9	-	30	45	ppm/°C
Temperature Coefficient of Frequency Response		-	-72	-	kΩ
Input impedance***	Ri (37.4 MHz)	-	-	-	pF
	Ci ( 1 MHz)	-	10.7	-	kΩ
Output impedance***	Ro (37.4 MHz)	-	-	-	pF
	Co ( 1 MHz)	-	3.4	-	

- \* The reference is fp-1.5 level.
- \*\* Relative value to fp point.
- \*\*\* Impedance equivalent circuits is shown on the right hand side.

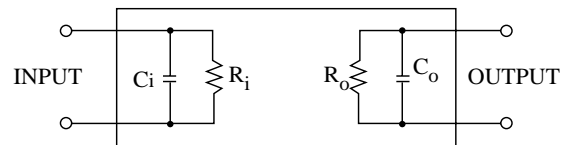
## PACKAGE DIMENSION



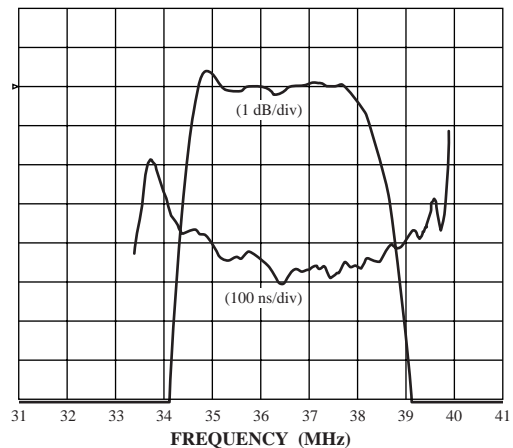
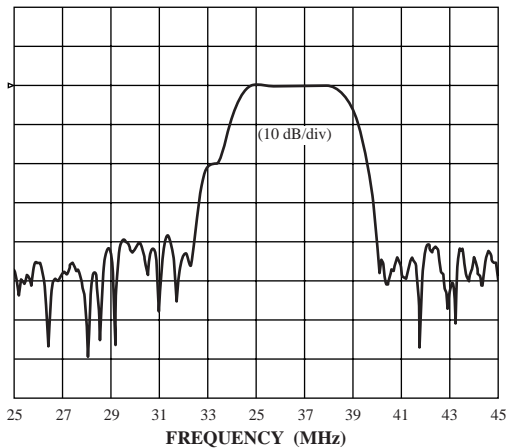
## PIN CONNECTIONS

- Pin No.
- #1. INPUT
  - #2. INPUT
  - #3. GROUND
  - #4. OUTPUT
  - #5. OUTPUT

## EQUIVALENT CIRCUIT

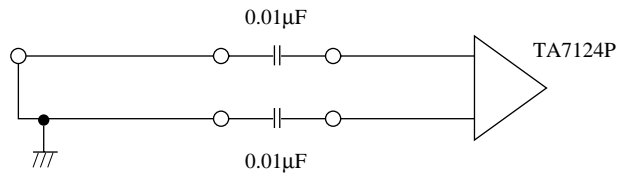


## FREQUENCY CHARACTERISTICS



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Measuring circuit for the reference level (0 dB) in the insertion loss measurement.



## ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Item	Rating
DC Voltage	3 V
Input signal voltage	5 V <sub>p-p</sub>
Operating temperature range	-20 to 70°C
Storage temperature range	-55 to 85°C

## ENVIRONMENT PERFORMANCE CHARACTERISTICS

Test conditions	Allowable change of center frequency *
High temperature exposure: 85°C, 500 h	±0.1%
Moisture resistance: 60°C, humidity, 90 – 95% 500 h	±0.1%
Thermal shock: 5 cycles, (-20°C) — (5°C) (80°C) no load	±0.1%
Mechanical shock: cf. MIL STD. -202D	no change
Solder temperature: 230°C for 10 sec.	±0.05%

\* Center of the two points, 14 dB down from the peak of the frequency response curve.

## CIRCUIT DIAGRAM

