# DW9274

## 92.025MHz IF SAW Filter

Replaces July 2002 version, DS4082-2.1

DS4082-3.0 December 2003

Reference level for the relative attenuation $a_{rel}$ of the DW9274 is the insertion loss. The insertion loss $a_e$ is defined as the insertion loss at the nominal frequency $f_N$. The centre frequency $f_C$ is the arithmetic mean value of the upper and lower frequencies at the 3 dB filter attenuation level relative to the insertion loss $a_e$. The temperature coefficient of frequency $T_{cf}$ is valid both for the reference frequency $f_C$ and the frequency response of the filter at the operating temperature. The frequency shift of the filter at the operating temperature not included in the production tolerance scheme.

## FEATURES

- 92.025MHz Centre Frequency (fo)
- Insertion Loss 3dB (Typ)
- 3dB Bandwidth 30kHz (Min)
- Quartz Temperature Stability

## ABSOLUTE MAXIMUM RATINGS

| | |
|---|---|
| DC Voltage VDV | 0V |
| Maximum Input Level | 0dBm |

## ORDERING INFORMATION

Order as: **DW9274**

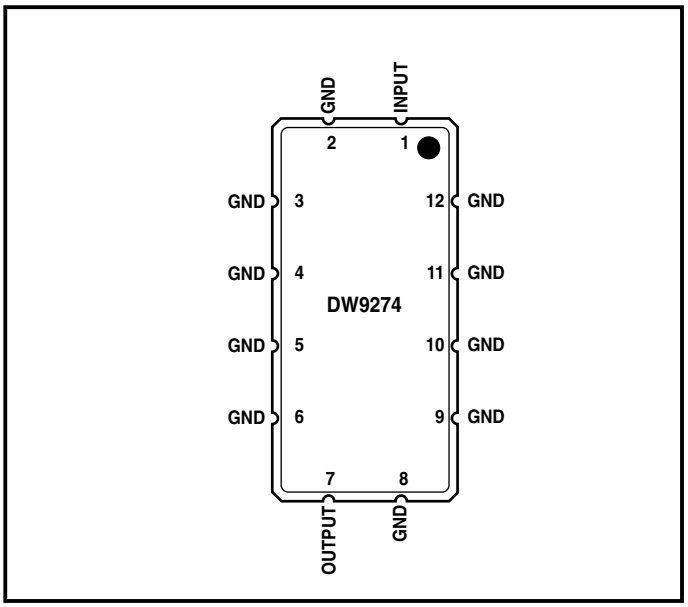



**Fig. Pin connections**

## ELECTRICAL SPECIFICATION @23°C

| Parameter | Symbol | Typical Value | Max. Limit/ Toerance | Units |
|---|---|---|---|---|
| Insertion loss (Reference level) | | 3.0 | 4.0 max | dB |
| Nominal frequency (at ambient temperature) | | - | 92.025 | MHz |
| Centre frequency (at ambient temperature) | $f_C$ | 92.025 | - | MHz |
| Pass band | | - | $f_c \pm 0.015$ | MHz |
| Pass band ripple | | 0.5 | 1.0 max | dB |
| Bandwidth | BW | - | 3 | dB |
| 3dB | | 63 | 30 min | kHz |
| Relative attenuation | $a_{rel}$ | | | |
| $f_C \pm 50$ kHz ... $f_C \pm 100$ kHz | | - | 5.0 | dB |
| $f_C$ +100 kHz ... $f_C$ + 200 kHz | | - | 35.0 | dB |
| $f_C$ + 200 kHz ... $f_C$ + 500 kHz | | - | 25.0 | dB |
| $f_C$ + 500 kHz ... $f_C$ + 1,0 MHz | | - | 40.0 | dB |
| $f_C$ – 100 kHz ... $f_C$ – 300 kHz | | - | 35.0 | dB |
| $f_C$ – 300 kHz ... $f_C$ – 900 kHz | | - | 60.0 | dB |
| $f_C$ – 900 kHz ... $f_C$ – 920 kHz | | - | 70.0 | dB |
| $f_C$ – 920 kHz ... $f_C$ – 1,0 MHz | | - | 60.0 | dB |
| Group delay ripple (within PB) | | - | 4 max | µs |
| Input power level | | - | 0 | dBm |
| Operating temperature range | | - | +65 | ˚C |
| Storage temperature range | | - | +85 | ˚C |
| Temperature coefficient | $T_{cf}$ | - | - | |

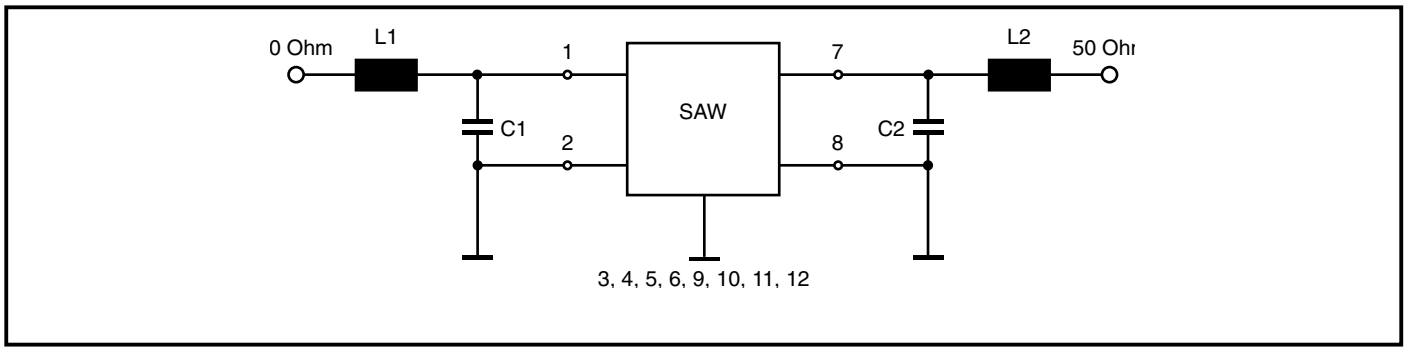
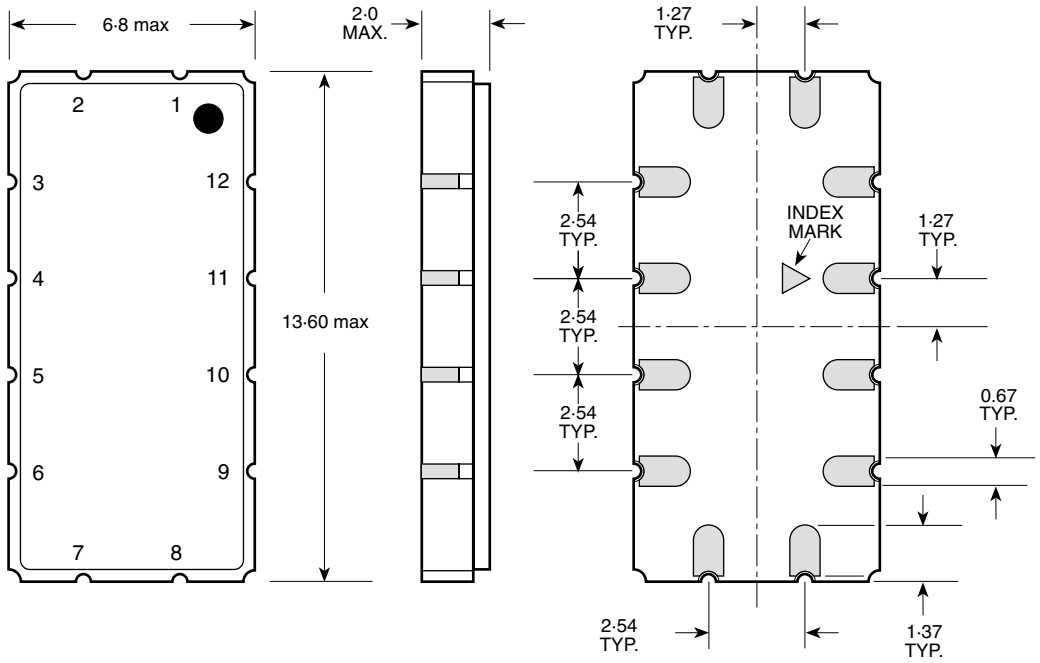



**Figure 2: 50Ω Test Circuit**

## PACKAGE DETAILS

Dimensions are shown thus: mm (in). DO NOT SCALE. For further package information, please contact Customer Services.




NOTES
1. Controlling dimensions are millimetres.
2. This package outline diagram is for guidance only. Please contact Dynex Semiconductor Customer Services for further information.

**Figure 3 Package outline detials**

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**P:-** Preliminary information represents the product as it is understood but details may change as the product is in design and development.

**A:-** Advance information denotes the product design is complete and final characterisation for volume production is well in hand.

**F:-** The product parameters are fixed and the product is available to datasheet specification.

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