

DW9248

71.0MHz LOW LOSS SAW I.F. FILTER FOR PERSONAL COMMUNICATIONS

The DW9248 has been specifically designed for GSM digital Personal Communications Applications, where the first I.F. filter stage is typically in the 60-80MHz range. The filter utilizes GPS's advanced SAW design and fabrication technology using a SPUDT based on Quartz substrate which provides high performance, low loss, and excellent temperature stability. The unique design obviates the need for distinct Roof and Channel filters, usually required to achieve a low shape factor with minimum bandwidth. The filters can be used in isolation, or cascaded format.

Standard Hermetically sealed package is a 4-pin DIL metal can (as per diagram) however, a Surface Mount package is available upon request.

FEATURES

- 71.0MHz Centre Frequency (f_0)
- Low Insertion Loss (6.5dB Typical)
- Excellent Sidelobe Suppression
- Hermetically Sealed Package
- Surface Mount Package Option Available

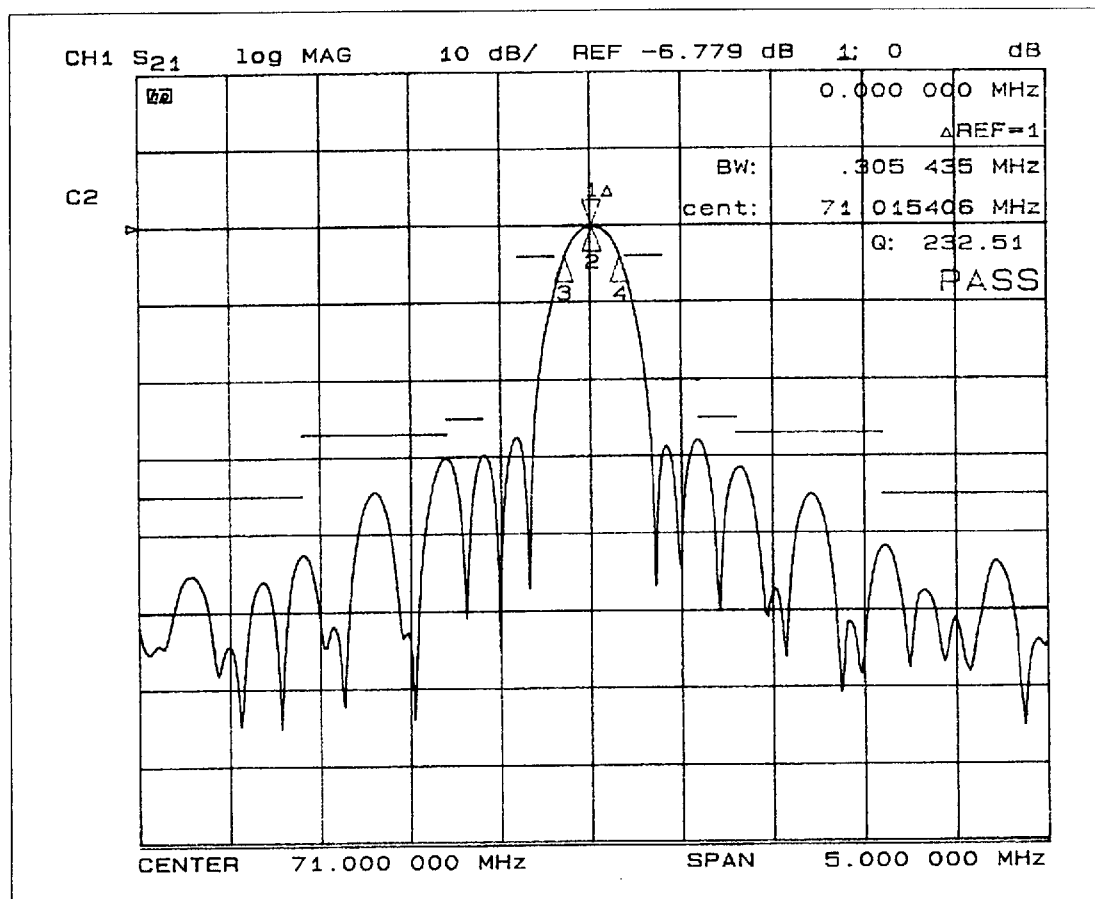


Figure 1: Plot

DW9248

ELECTRICAL CHARACTERISTICS

Parameter	Min	Typ	Max	Units
Centre Frequency (f_0)		71.0		MHz
1dB Bandwidth	± 65			kHz
1.5dB Bandwidth	± 82.5			kHz
Insertion Loss		6.5	8.0	dB
Group Delay ($f_0 \pm 80$ kHz)		200	300	ns
Stopband Rejection				
$f_0 \pm 200$ kHz to $f_0 \pm 400$ kHz	4			dB
$f_0 \pm 400$ kHz to $f_0 \pm 600$ kHz	20			dB
$f_0 \pm 600$ kHz to $f_0 \pm 800$ kHz	25			dB
$f_0 \pm 800$ kHz to $f_0 \pm 1.6$ MHz	27			dB
$f_0 \pm 1.6$ MHz to $f_0 \pm 10$ MHz	35			dB
Operating Temperature	-25		+85	°C

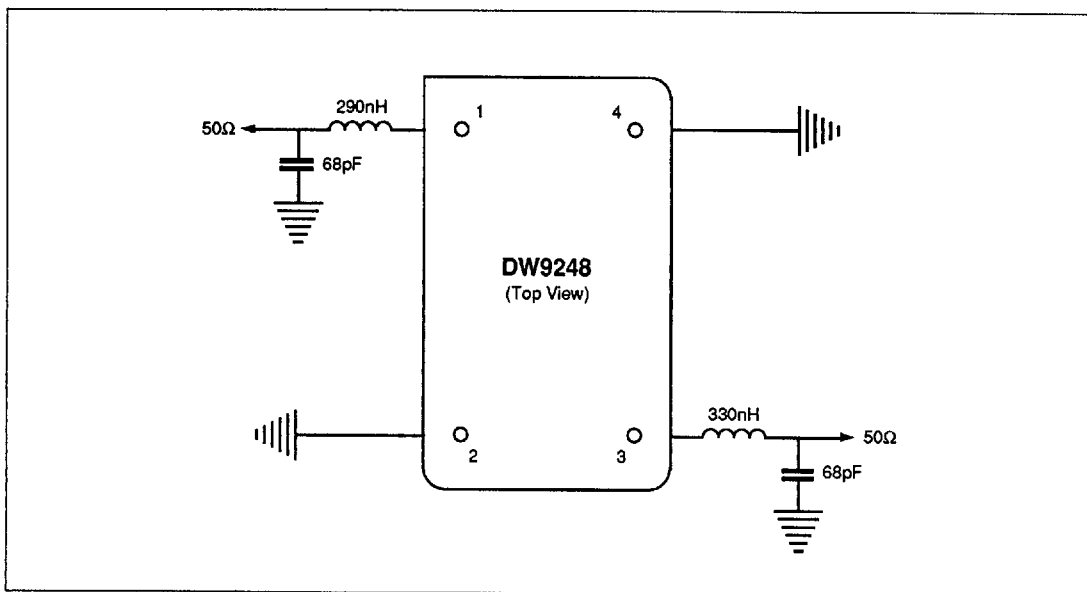


Figure 2: Match to 50Ω

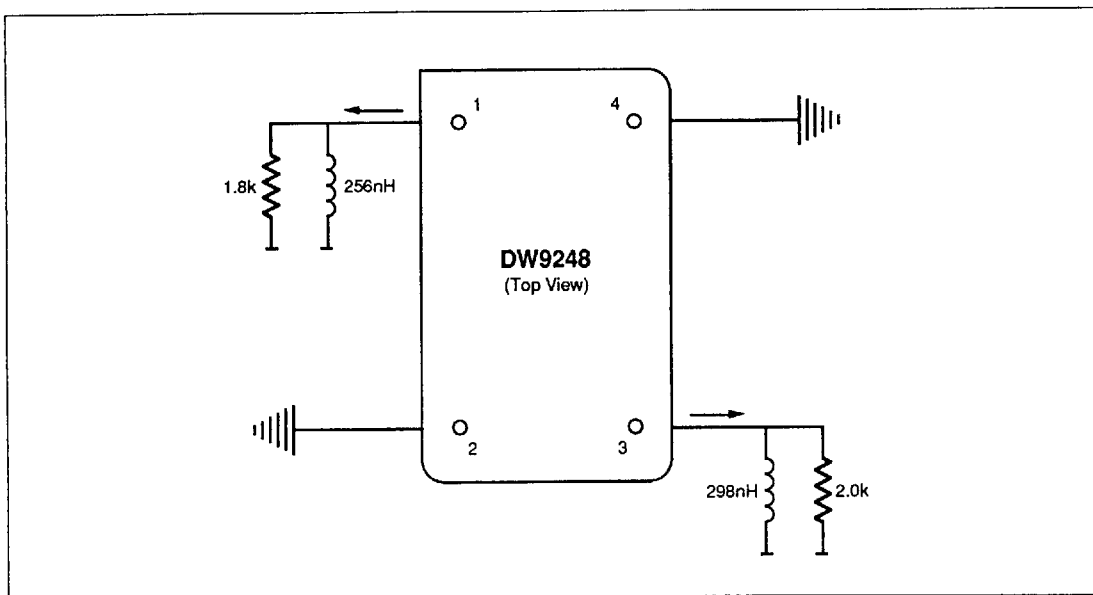


Figure 3: External Shunt Equivalent R-L Values for DW9248 Match

PACKAGE OUTLINE All dimension in mm.

