

The DW9256 has been designed specifically for the Personal Communications market, as an IF filter with a centre frequency of 133MHz. The filter utilises Mitel Semiconductor's low loss Transversal filter technology based on a Quartz substrate for excellent temperature stability.

A minimum 3dB passband of  $\pm 75\text{kHz}$  is combined with a high shape factor to give good adjacent channel rejection.

The device is available in a surface mount, ceramic leadless chip carrier, suited to high volume automated assembly systems.

## FEATURES

- 133MHz Centre Frequency ( $f_0$ )
- Low Insertion Loss (7dB maximum)
- 3dB Passband  $\pm 75\text{kHz}$  (minimum)
- Quartz Temperature Stability
- Low Profile Ceramic LCC Package

## ABSOLUTE MAXIMUM RATINGS

DC Voltage            VDC   0V  
Input Power Max.    PIN   10dBm

## NOMINAL IMPEDANCE

Input:             $520\Omega // 20\text{pF}$   
Output:            $200\Omega // 30\text{pF}$

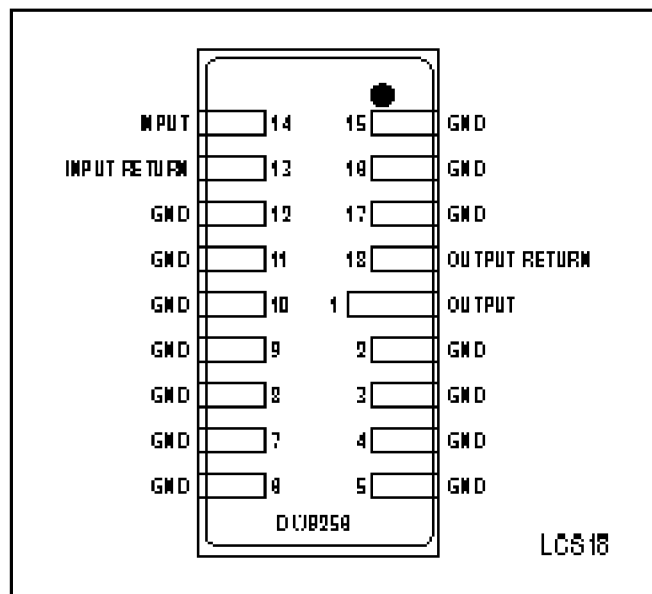
## 50 $\Omega$ TEST BOARD COMPONENTS

Input:            Series Ind. 180nH, Shunt Ind. 100nH, Shunt Cap. 2.2pF  
Output:           Shunt Ind. 68nH, Series Ind. 82nH

Components: Coilcraft 1008CS Inductors : Murata 0805 Capacitors

## ORDERING INFORMATION

DW9256

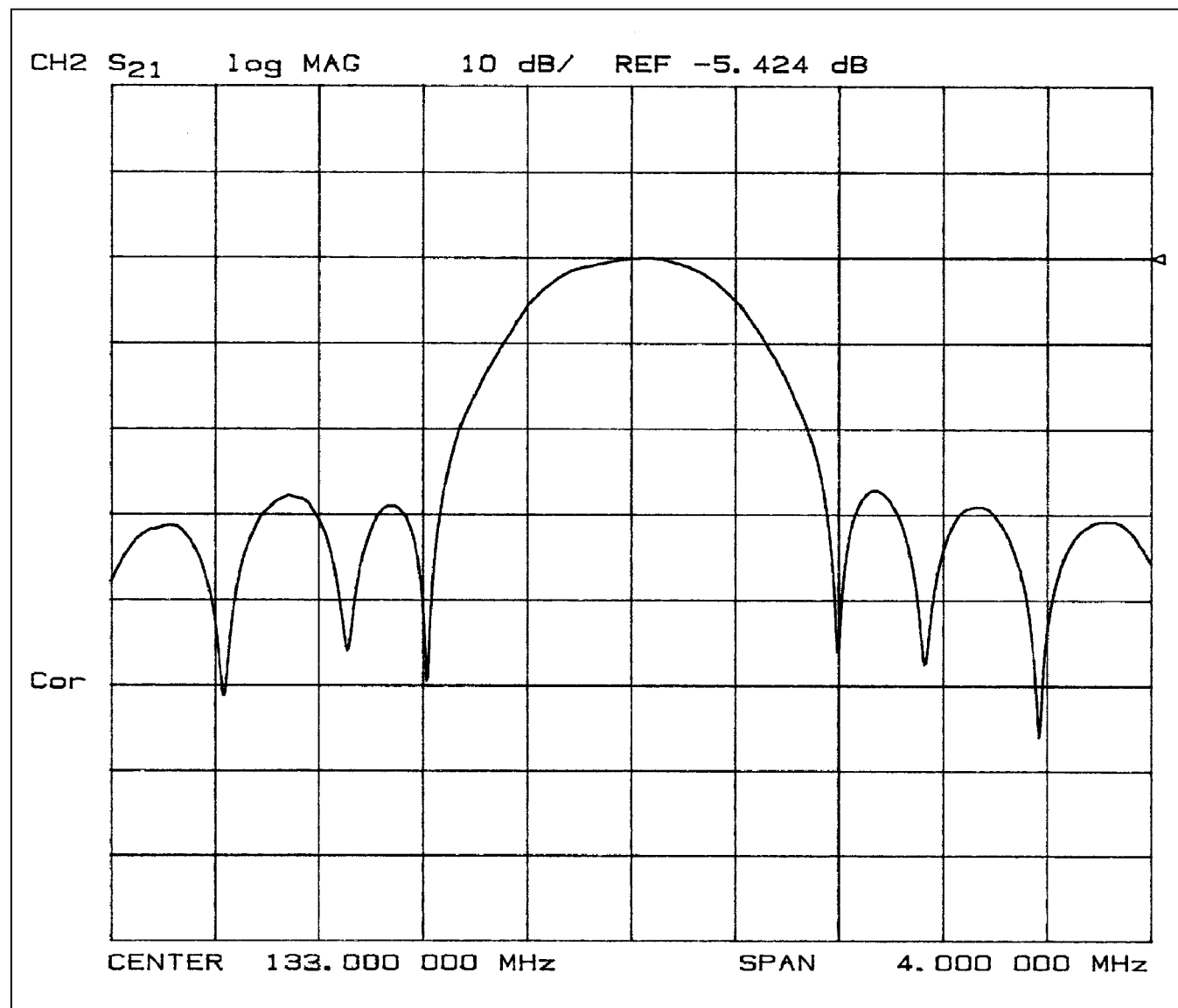


## DW9256

### ELECTRICAL CHARACTERISTICS @ 25°C

Parameter	Min	Typ	Max	Units
Centre Frequency	-	133	-	MHz
1dB Bandwidth	±75	±170	-	kHz
3dB Bandwidth	±75	±300	-	kHz
Insertion Loss	4	5	7	dB
Amplitude Ripple	-	0.5	2	dB
Group Delay Ripple	-	150	1000	ns
Stopband Rejection:				
fo ± 400 - 600 kHz	3	5	-	dB
fo ± 600 - 800 kHz	10	15	-	dB
fo ± 800 - 1500 kHz	20	30	-	dB
fo - 1500 kHz - 50 MHz	30	35	-	dB
fo + 1500 kHz + 200 MHz	30	35	-	dB
Operating Temperature Range	-20	-	+80	°C

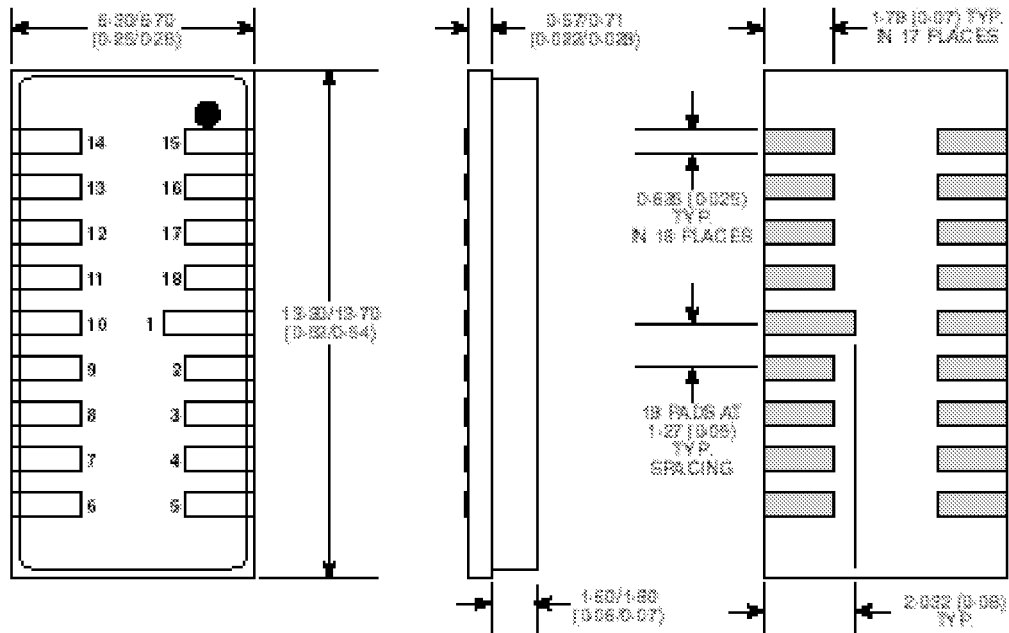
## PLOT



## DW9256

### PACKAGE DETAILS

Dimensions are shown thus: mm (in). For further package information, please contact your local Customer Service Centre.



#### NOTES

1. Controlling dimensions are millimetres.
2. This package outline diagram is for guidance only. Please contact your Mitel Semiconductor Customer Service Centre for further information.

### 18-PAD LEADLESS CHIP CARRIER (SLAM) - LCS18



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