

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 // 20pF  
 Output:          200 // 30pF

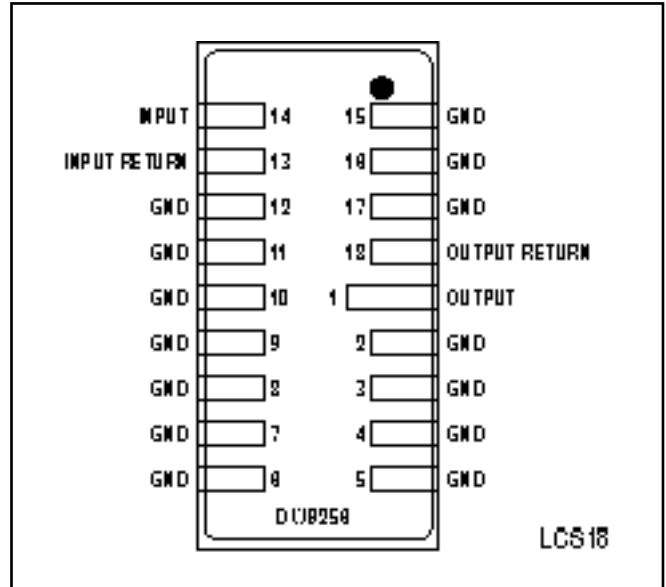
### 50 TEST BOARD COMPONENTS

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

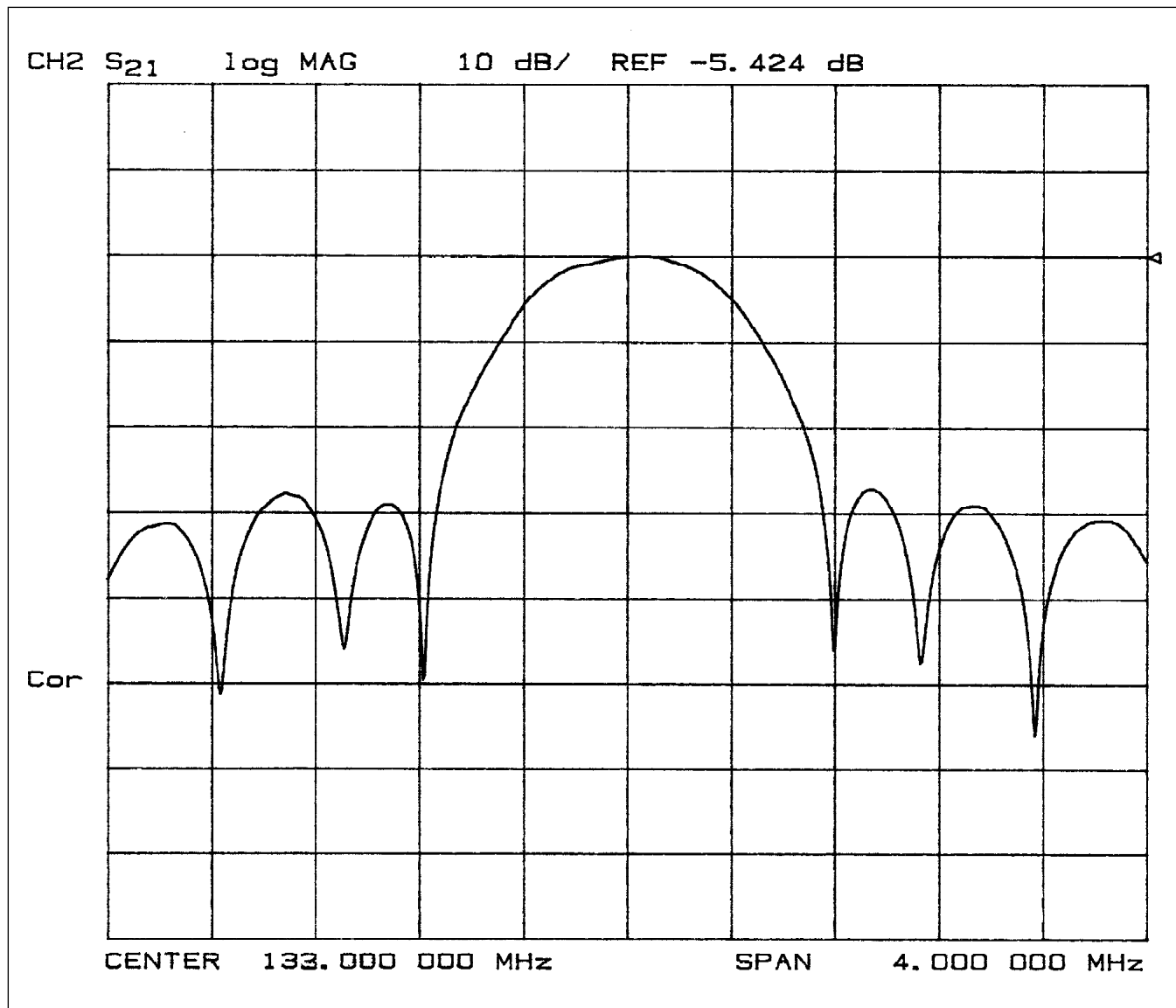


## DW9256

### 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

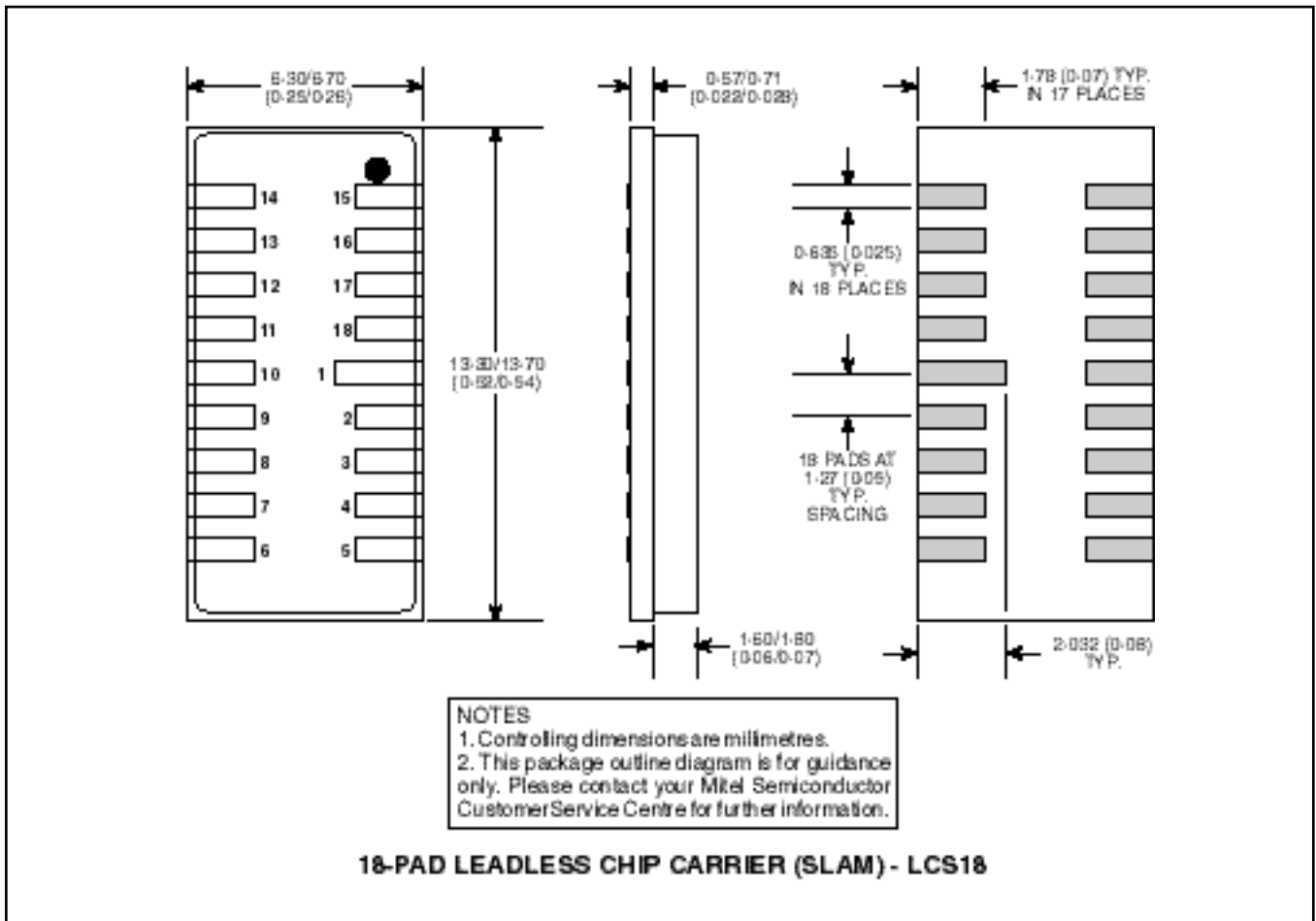
PLOT



# DW9256

## PACKAGE DETAILS

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



HEADQUARTERS OPERATIONS  
**MITEL SEMICONDUCTOR**  
Cheney Manor, Swindon,  
Wiltshire SN2 2QW, United Kingdom.  
Tel: (01793) 518000  
Fax: (01793) 518411

**MITEL SEMICONDUCTOR**  
1500 Green Hills Road,  
Scotts Valley, California 95066-4922  
United States of America.  
Tel (408) 438 2900  
Fax: (408) 438 5576/6231

Internet: <http://www.gpsemi.com>

CUSTOMER SERVICE CENTRES

- **FRANCE & BENELUX** Les Ulis Cedex Tel: (1) 69 18 90 00 Fax: (1) 64 46 06 07
- **GERMANY** Munich Tel: (089) 419508-20 Fax: (089) 419508-55
- **ITALY** Milan Tel: (02) 6607151 Fax: (02) 66040993
- **JAPAN** Tokyo Tel: (03) 5276-5501 Fax: (03) 5276-5510
- **KOREA** Seoul Tel: (2) 5668141 Fax: (2) 5697933
- **NORTH AMERICA** Scotts Valley, USA Tel: (408) 438 2900 Fax: (408) 438 5576/6231
- **SOUTH EAST ASIA** Singapore Tel: (65) 3827708 Fax: (65) 3828872
- **SWEDEN** Stockholm Tel: 46 8 702 97 70 Fax: 46 8 640 47 36
- **TAIWAN, ROC** Taipei Tel: 886 2 25461260 Fax: 886 2 27190260
- **UK, EIRE, DENMARK, FINLAND & NORWAY**  
Swindon Tel: (01793) 726666 Fax: (01793) 518582

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