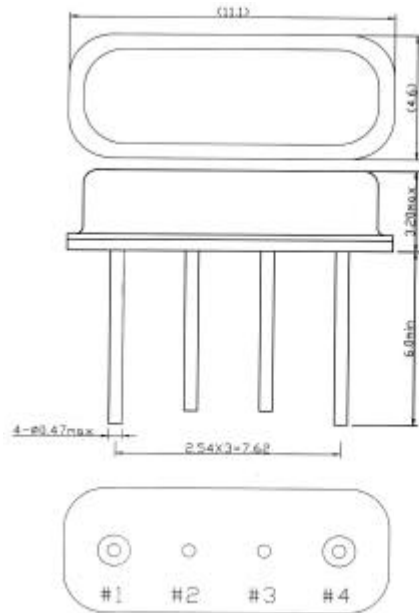


DATA SHEET

DS0197_01
14.05.01

Part Number	139.00 MHz SAW Filter	
TSF0139-L1	Pager	

SPECIFICATION



PACKAGE F-11

All Dimensions in mm

Input : 1

Output : 4

Ground : 2 & 3

PRODUCT FEATURES :

- **HIGH STABILITY**
- **LOW LOSS**
- **SMALL SIZE**

CONTACT :

TEMEX S.A.W.

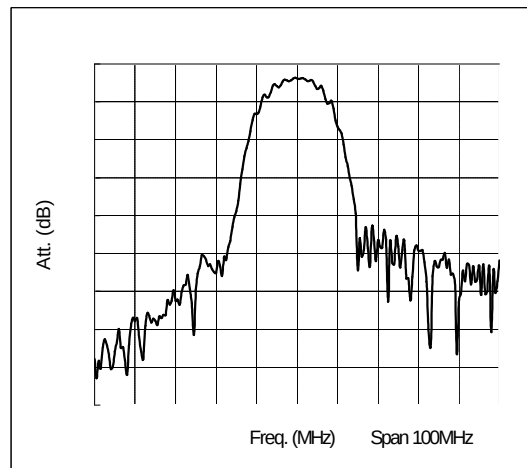
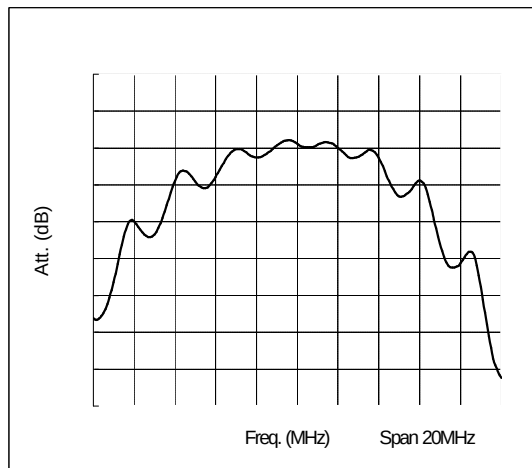
PUITS-GODET 8,
2000 NEUCHÂTEL
SWITZERLAND

TEL. : ++41 32 722 18 20

FAX : ++41 32 722 18 29

➤ *OR CONTACT YOUR TEKELEC TEMEX SALES REPRESENTATIVE*

TYPICAL PERFORMANCE (Measurement)



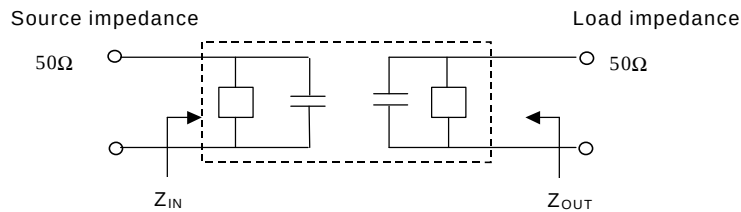
ELECTRICAL SPECIFICATIONS

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Center Frequency	f_0	Nominal		139.0		MHz
Insertion Loss	IL	$f_0 \pm 4\text{MHz}$			6.5	dB
Rejection wrt 0 dB	R_{j1}	$f_0 - 100\text{ MHz to } f_0 - 38\text{ MHz}$	50			dB
	R_{j2}	$f_0 + 38\text{ MHz to } f_0 + 100\text{ MHz}$	42			dB

OPERATIONAL ENVIRONMENT

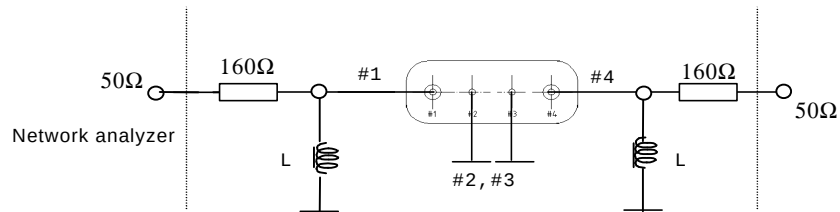
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Power Dissipation		Maximum			0	dBm
DC Voltage		Maximum			10	V
Storage Temperature			-40		+85	°C
Operating Temperature		Operational	-10		+50	°C
Impedance at f_0	R_{in}	See note 1		210		Ohms
	C_{in}	See note 1		13.5		pF
	R_{out}	See note 1		210		Ohms
	C_{out}	See note 1		13.5		pF

Note 1: $Z_{IN} = R_{IN} // C_{IN}$ and $Z_{OUT} = R_{OUT} // C_{OUT}$



Test Item	Condition of Test	Requirements
Shock (Drop Test)	Random free drops 3 times from height of 1.0 meter onto concrete floor.	The specimens shall meet the electrical specifications.
Vibration	Total peak amplitude : 1.5 mm Vibration frequency : 10 to 55 Hz Sweep period : 1.0 minute Vibration directions : 3 mutually perpendicular Duration : 2 hours / direction	
Solderability (Solder Heat)	Immersed pad in soldering bath at $245 \pm 5^\circ\text{C}$ for 5 ± 0.5 seconds.	75% or more of the immersed surface shall be covered with solder.
Temperature Characteristics	Specimens shall be measured within -10°C to $+50^\circ\text{C}$ temperature range.	The specimen shall meet the electrical specifications.
Dry Heat (Aging Test)	Temperature : $125 \pm 2^\circ\text{C}$ Duration : 250 hours	
Cold Resistance	Temperature : $-40 \pm 3^\circ\text{C}$ Duration : 96 hours	
Thermal Shock	Heat cycle conditions -55°C 25°C 85°C (30 min) (5 min) (30 min) Cycle time : 5 times	

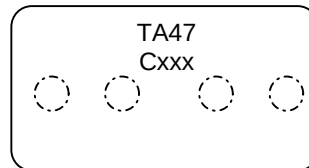
TEST CIRCUIT



0 dB Level



MARKING SPECIFICATION



Where xxx is the lot number