

May 9<sup>th</sup>, 2003

# TMX T504

## SAW BANDPASS FILTER – GSM EDGE – IF

Preliminary Specification (Rev -)

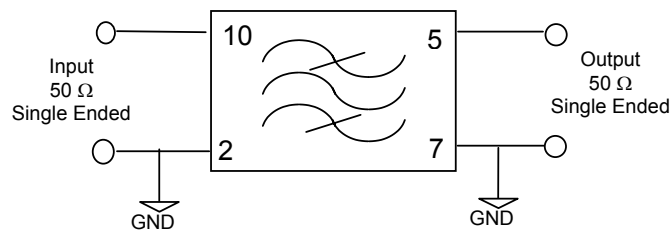
Operating Temperature range : [-10°C ; +85°C]

Electrical Parameters	Unit	Minimum	Typical	Maximum
Source Impedance (single ended)	$\Omega$	-	50	-
Load Impedance (single)	$\Omega$	-	50	-
Center Frequency fo	MHz	-	208	-
Template on the amplitude, reference is loss at fo				
Bandwidth at -1 dB	MHz	0.8	7	-
From 10 to 180 MHz	dB	38	56	-
From 180 MHz to 194 MHz	dB	30	45	-
From 222 MHz to 236 MHz	dB	5	40	-
From 236 MHz to 450 MHz	dB	12	52	-
Insertion Loss in passband	dB	-	1.7	2.5
Variation in Insertion Loss	dB	-	0.15	$\pm 1$
Passband Group delay Variation <sup>(1)</sup>	ns	-	6.6	30
Input and Output Return Losses in passband	dB	10	14	-
Package type & size				
Length x Width	mm <sup>2</sup>	-	9.1 x 4.8	-
Height	mm	-	1.6	1.8
Pin Out				
Input	10	Output	5	
Input Return	2	Output return	7	
Case Ground	1,3,6,8	To Be Grounded	1,2,3,4,6,7,8,9	

**Notes :**

(1) Smoothing aperture < 50 kHz, averaging < 16 samples

### MATCHING NETWORK FOR 50 $\Omega$ SINGLE / 50 $\Omega$ SINGLE CONFIGURATION



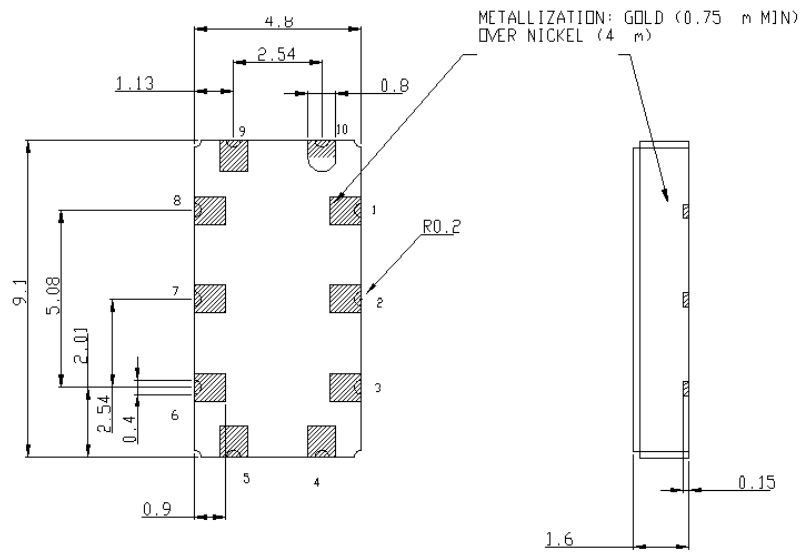
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### PACKAGE DRAWING



TEMEX reserves the right to modify herein specifications and information at any time when necessary to provide optimum performance and cost.

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### TYPICAL S21 RESPONSE (MEASUREMENT)

References		Scales	
CENTER FREQUENCY	= 208 MHz	SCALE_FREQUENCY	= 10 MHz/div
LOSS REFERENCE	= 1.67 dB	SCALE_AMPLITUDE	= 5 dB/div
DELAY REFERENCE	= 0.12 $\mu$ s		
PHASE REFERENCE	= 88.43 deg		

