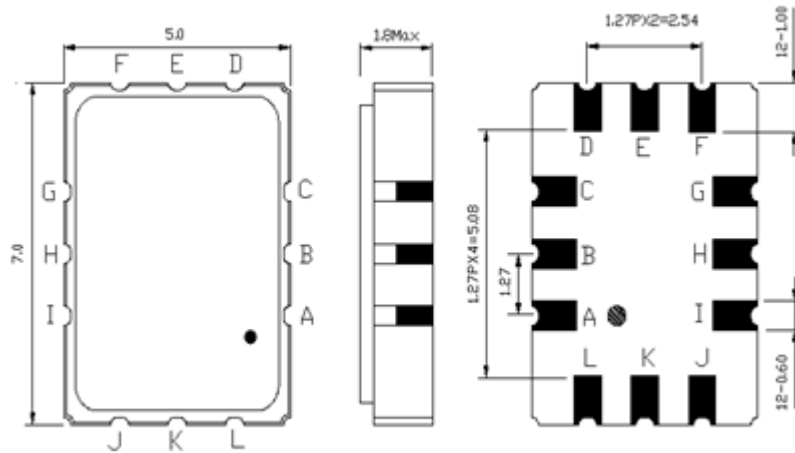


- 192.00 MHz IF SAW Filter / 6.75 MHz Bandwidth
- Revision 0: 24 Mar. 2009

## Electrical Characteristics

D A T A				TYP. VALUE		TOLERANCE / LIMIT			
<b>Insertion loss</b>				$a_e$	10.3	dB	max.	12.0	dB
(reference level)									
<b>Nominal frequency</b>				$f_N$	-			192.0	MHz
<b>Centre frequency</b>				$f_C$	192	MHz		-	
<b>Passband</b>				PB	-		$f_N \pm$	2.75	MHz
<b>Pass band ripple</b>				p-p	0.5	dB	max.	1	dB
<b>Amplitude ripple over any 200kHz of the PB</b>				p-p	0.25	dB	max.	0.4	dB
<b>Bandwidth</b>				BW					
1	dB				6.75	dB	min.	6.0	MHz
40	dB				11.35	dB	max.	12	MHz
<b>Relative attenuation</b>				arel					
$f_N$			...	$f_N \pm$	2.75	MHz	0.5	dB	max. 1 dB
$f_N$	-	92	MHz	...	$f_N -$	62	MHz	55	dB min. 50 dB
$f_N$	-	62	MHz	...	$f_N -$	6	MHz	45	dB min. 40 dB
$f_N$	+	6	MHz	...	$f_N +$	58	MHz	45	dB min. 40 dB
$f_N$	+	58	MHz	...	$f_N +$	98	MHz	65	dB min. 50 dB
<b>Group delay</b>					0.73	us	max.	1	us
<b>Group delay ripple within PB</b>				p-p	32	ns	max.	60	ns
<b>Group delay ripple over any 200kHz of the PB</b>				p-p	25	ns	max.	40	ns
<b>Return loss</b>					-		min.	9	dB
<b>Input power level</b>					-		max.	18	dBm
<b>Operating temperature range</b>				OTR	-			- 40 °C ... + 85 °C	
<b>Storage temperature range</b>					-			- 40 °C ... + 85 °C	
<b>Temperature coefficient of frequency</b>				TCf **	-18	ppm/K		-	

## Package Dimensions

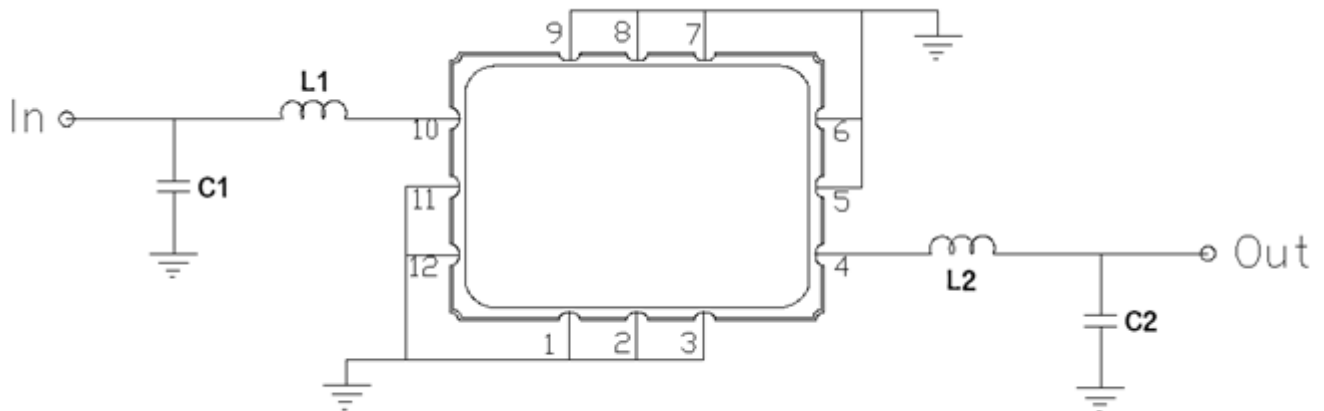


- ① **TRANSKO:** Brand
- ② **TL192055B:** Model Name
- ③ **X :** Date Code (Year)
- ④ **Y :** Date Code (Month)
- ⑤ **Z:** Date Code (Date)
- : Index Dot

### Pin Description

Pin Description	
A, B, C, E, F, G, H, I, K, L	Ground
J	Input +
L	Input – or Ground
D	Output +
F	Output – or Ground

## Testing Environment



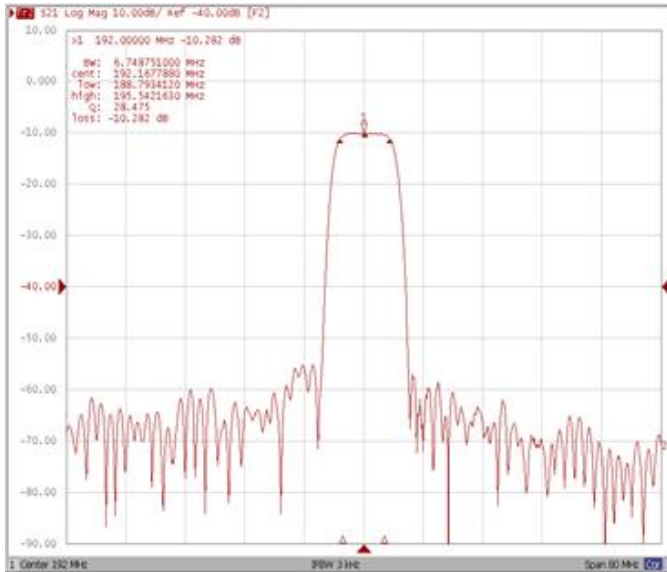
### Test Fixture & Values

<b>Input</b>	L1=47 nH. C1=30 pF
<b>Output</b>	L2=39 nH. C2=36 pF
<b>Source/Load Impedance</b>	50 Ω

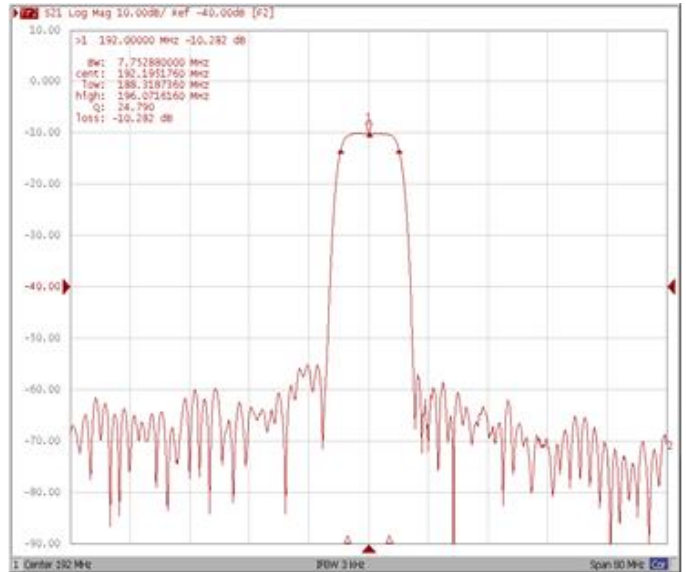
## Frequency Characteristics

### Frequency Response

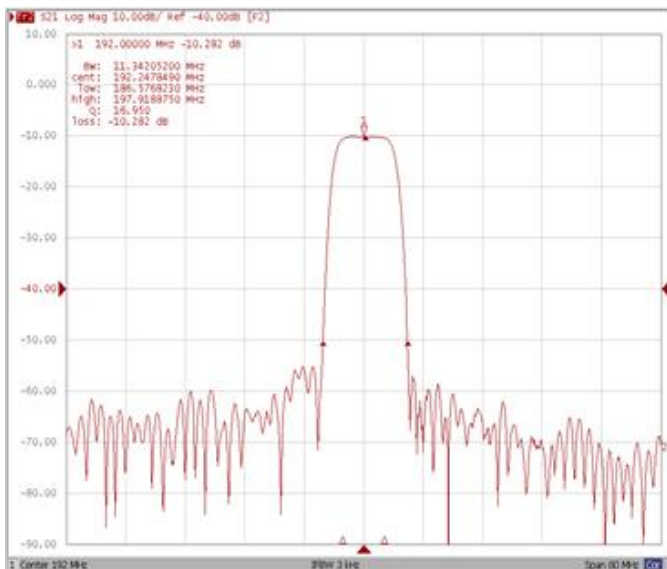
**Bandwidth at -1.0 dB**



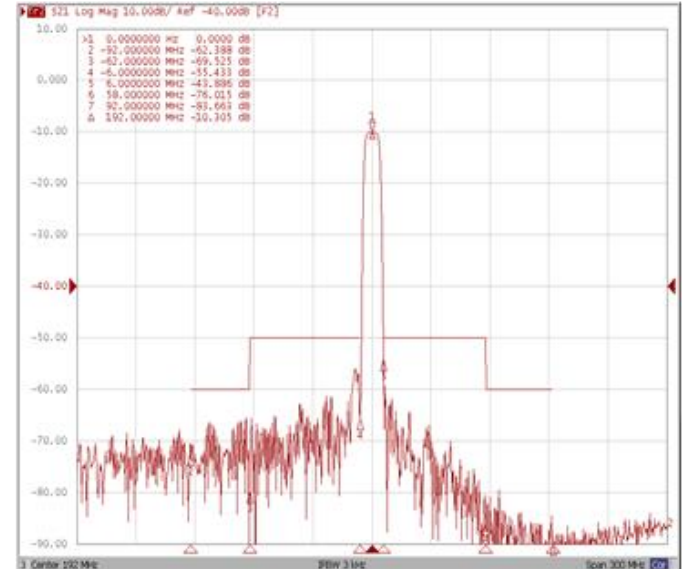
**Bandwidth at -3.0 dB**



**Bandwidth at -40.0 dB**



**Relative Attenuation**

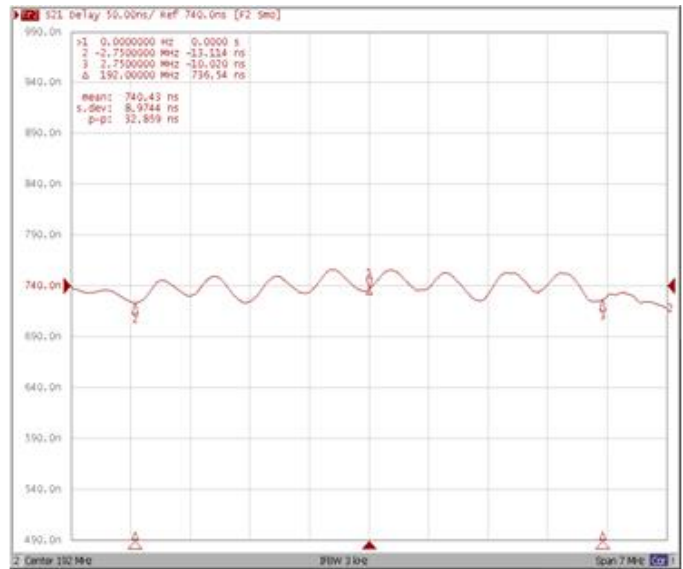


## Frequency Response

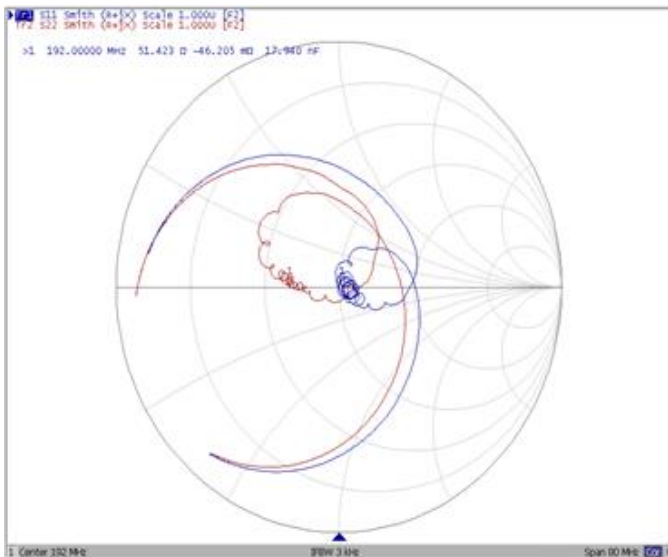
**Ripple Variation at Fo  $\pm 2.75$ MHz**



**Group Delay Variation at Fo  $\pm 2.75$ MHz**



**Smith Chart**



**Return Loss**

