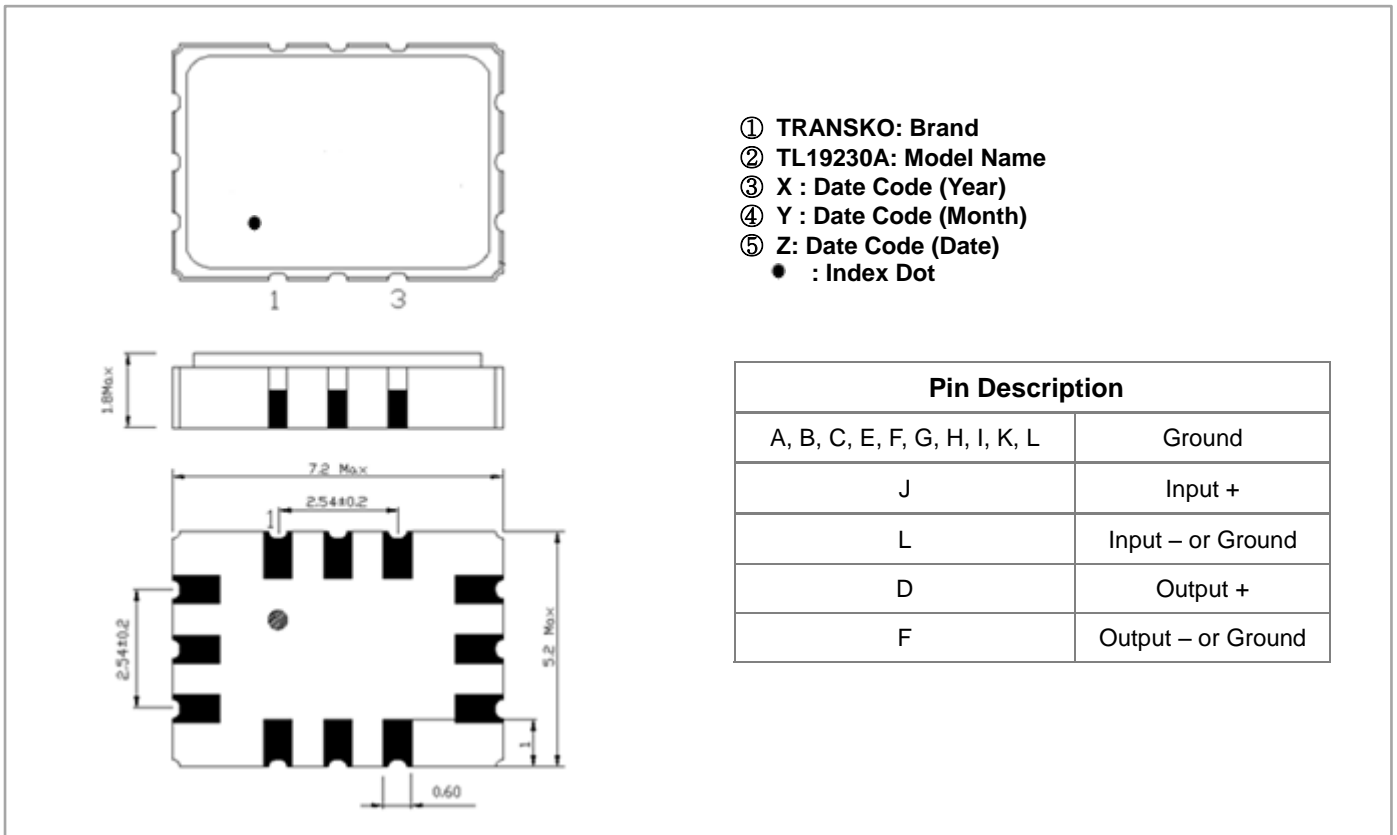


- 192.0 MHz IF SAW Filter / 33.64 MHz Bandwidth
- Revision 0: 1 Apr. 2009

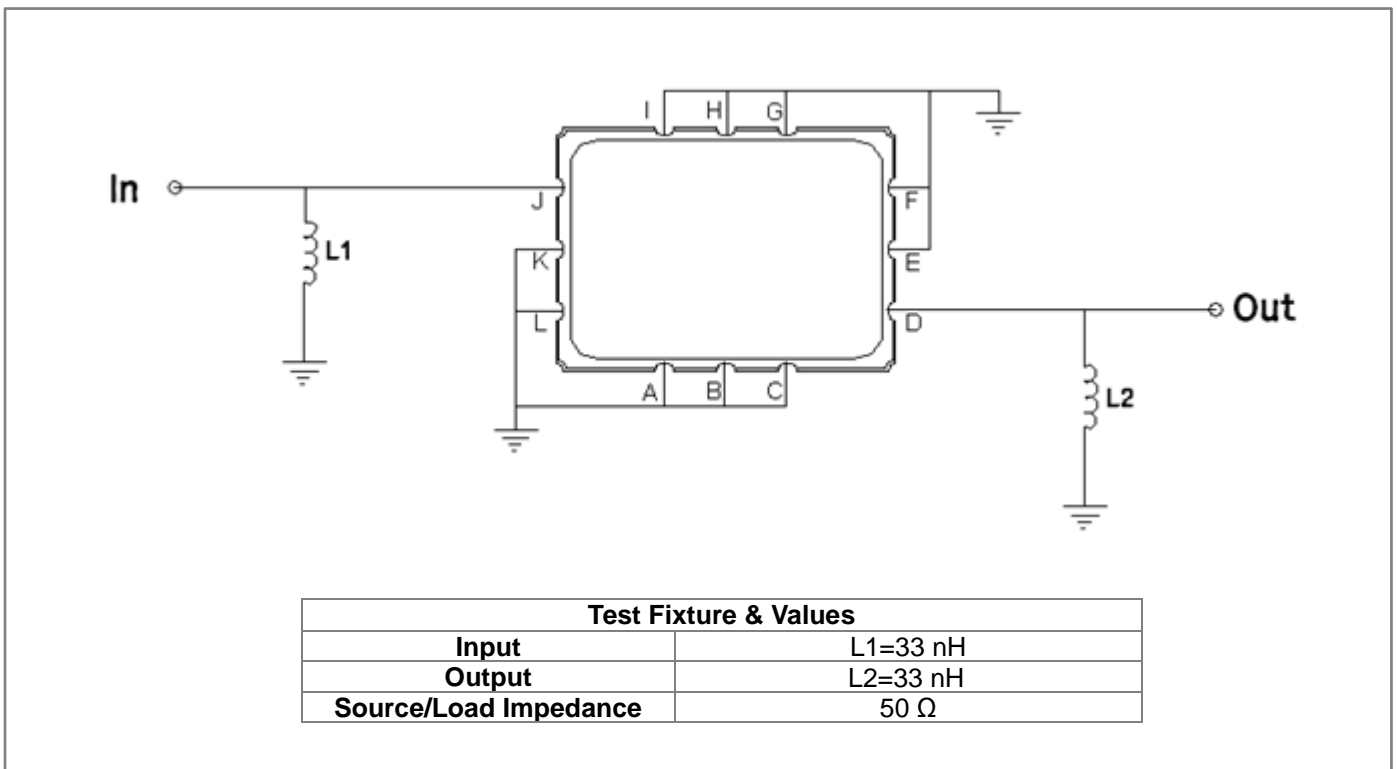
## Electrical Characteristics

DATA		TYP. VALUE		TOLERANCE / LIMIT			
Insertion loss (reference level)		$a_e$	13.0	dB	max.	15.0	dB
Nominal frequency		$f_N$	-			192.0	MHz
Centre frequency		$f_C$	192	MHz		-	
Passband		PB	-		$f_N \pm 15$		MHz
Pass band ripple		p-p	0.45	dB	max.	1	dB
Amplitude ripple over any 200kHz of the PB		p-p	0.3	dB	max.	0.4	dB
Bandwidth		BW					
1	dB		33.65	dB	min.	33.5	MHz
40	dB		39.70	dB	max.	42	MHz
Relative attenuation		$a_{rel}$					
$f_N$		...	$f_N \pm 15$	MHz		0.45	dB
$f_N$	$\pm 18$	MHz	...	$f_N \pm 21$	MHz	5.5	dB
$f_N$	- 90	MHz	...	$f_N - 24$	MHz	45	dB
$f_N$	+ 36	MHz	...	$f_N + 90$	MHz	45	dB
Group delay			0.73	us	max.	1	us
Group delay ripple within PB		p-p	30	ns	max.	80	ns
Group delay ripple over any 200kHz of the PB		p-p	25	ns	max.	35	ns
Return loss			10		min.	7	dB
Input power level			-		max.	18	dBm
Operating temperature range		OTR	-			- 40 °C ... + 85 °C	
Storage temperature range			-			- 40 °C ... + 85 °C	
Temperature coefficient of frequency		TCf **	-86	ppm/K		-	

## Package Dimensions



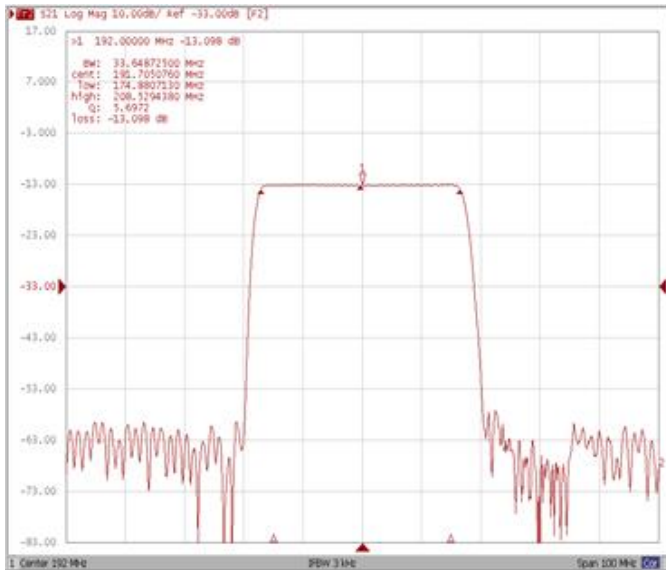
## Testing Environment



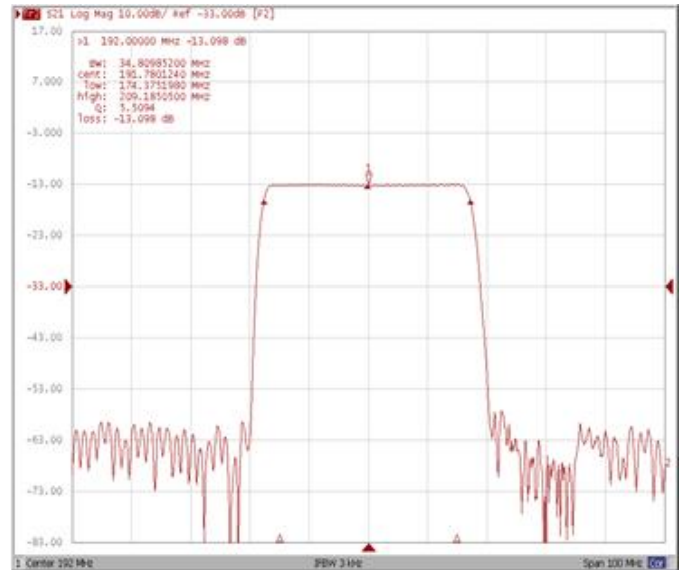
## Frequency Characteristics

### Frequency Response

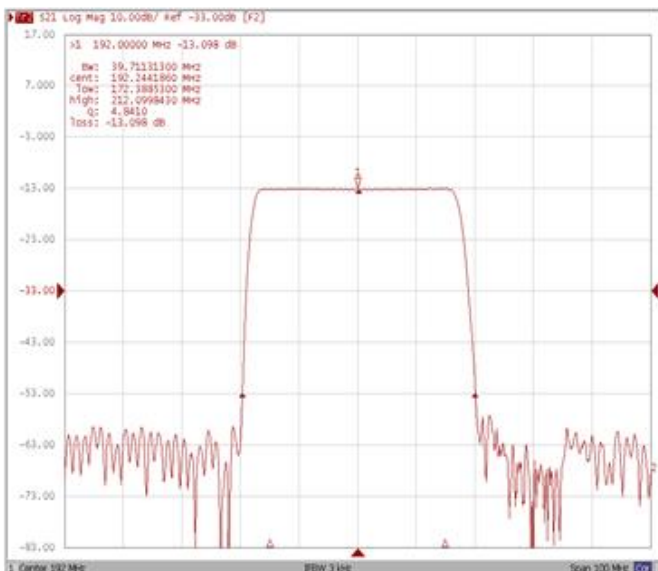
**Bandwidth at -1.0 dB**



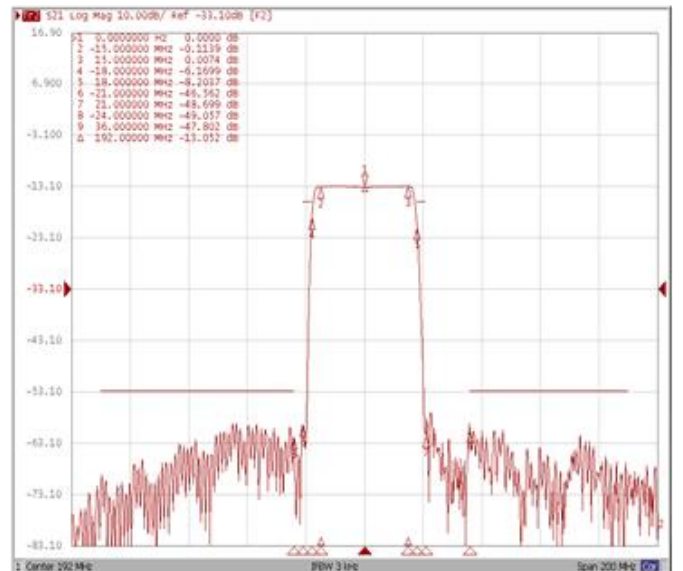
**Bandwidth at -3.0 dB**



**Bandwidth at -40.0 dB**

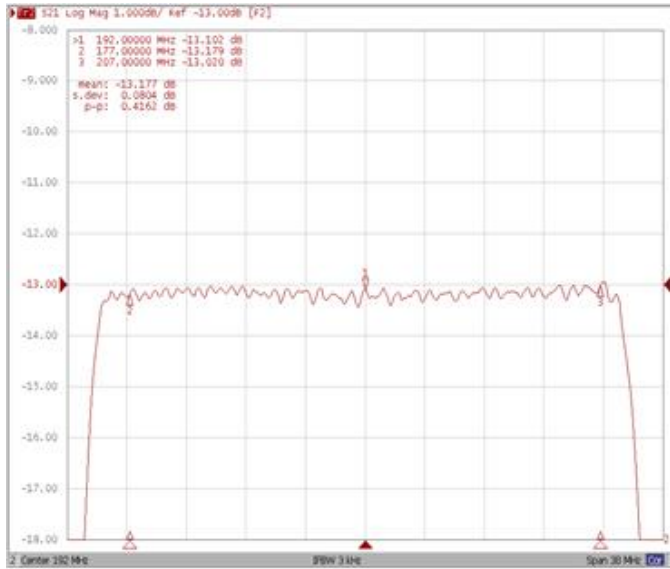


**Relative Attenuation**

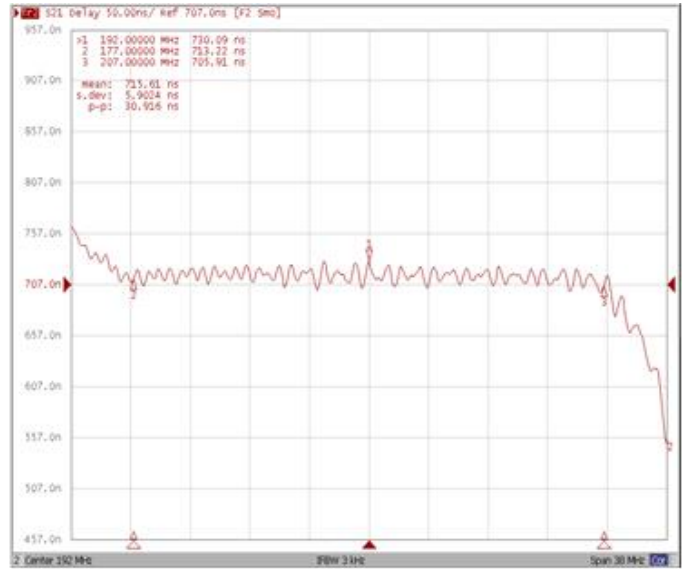


## Frequency Response

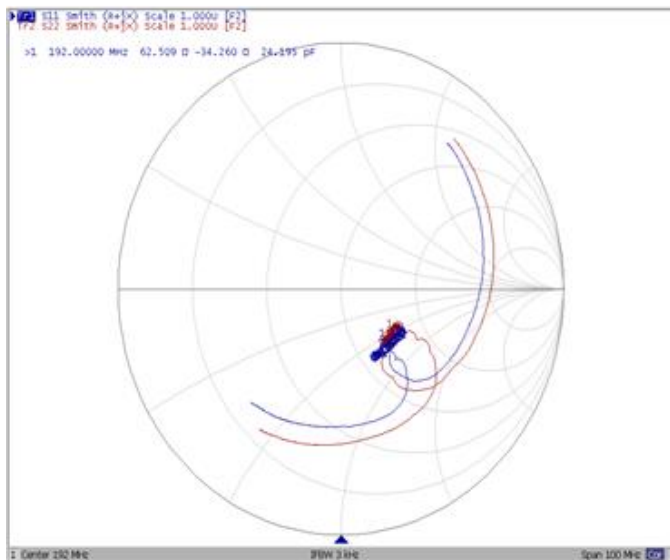
**Ripple Variation at Fo ±15.0MHz**



**Group Delay Variation at Fo ±15.0MHz**



**Smith Chart**



**Return Loss**

