



Siemens Matsushita Components

SAW Components Low-Loss Filter

B4687
902,5 MHz

Data Sheet

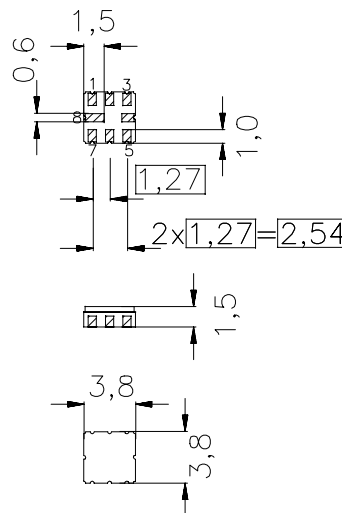
Features

- Low loss RF filter for GSM mobile phone TX
- Low insertion attenuation
- Usable passband 25 MHz
- No matching network required for operation at 50 Ω (input) and 200 Ω (output)
- Unbalanced input, balanced output
- Ceramic Package for **Surface Mounted Technology (SMT)**

Terminals

- Ni, gold-plated

SMD ceramic package **QCC8B**

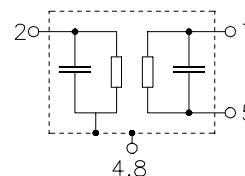


Dimensions in mm, approx. weight 0,07 g

Pin configuration

- | | |
|-----|-------------------------|
| 2 | Input (50 Ω) |
| 4 | Input ground |
| 5 | Balanced output (200 Ω) |
| 7 | Balanced output (200 Ω) |
| 1,3 | To be grounded |
| 6 | N.C. |
| 4,8 | Case - ground |

Filter is reciprocal



Type	Ordering code	Marking and Package according to	Packing according to
B4687	B39901-B4687-Z810	C61157-A7-A46	F61074-V8037-Z000

Electrostatic Sensitive Device (ESD)

Maximum ratings

Operable temperature range	T	- 20/+ 75	°C	
Storage temperature range	T_{stg}	- 40/+ 85	°C	
DC voltage	V_{DC}	0	V	
Source power	P_s	10	dBm	source impedance 50 Ω



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Operating temperature range: $T = 25 \pm 2 \text{ }^\circ\text{C}$
 Terminating source impedance: $Z_S = 50 \text{ } \Omega$ unbalanced
 Terminating load impedance: $Z_L = 200 \text{ } \Omega \parallel 80\text{nH}$ balanced

		min.	typ.	max.	
Center frequency (center frequency between 3 dB points)	f_c	—	902,5	—	MHz
Maximum insertion attenuation 890,0 MHz ... 915,0 MHz Reference level for the following data	α_{\max}	—	3,0	3,5	dB
Amplitude ripple in passband (p-p) 890,0 MHz ... 915,0 MHz	$\Delta\alpha$	—	0,8	1,0	dB
Relative attenuation (relative to α_{\max})	α_{rel}				
0,0 MHz ... 600,0 MHz		40	75	—	dB
600,0 MHz ... 870,0 MHz		25	35	—	dB
925,0 MHz ... 935,0 MHz		7	15	—	dB
935,0 MHz ... 990,0 MHz		20	27	—	dB
990,0 MHz ... 1500,0 MHz		40	55	—	dB
1500,0 MHz ... 3000,0 MHz		20	39	—	dB



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Operating temperature range: $T = -20\text{ °C} \dots 75\text{ °C}$
 Terminating source impedance: $Z_S = 50\ \Omega$ unbalanced
 Terminating load impedance: $Z_L = 200\ \Omega \parallel 80\text{nH}$ balanced

		min.	typ.	max.	
Center frequency (center frequency between 3 dB points)	f_c	—	902,5	—	MHz
Maximum insertion attenuation 890,0 MHz ... 915,0 MHz Reference level for the following data	α_{max}	—	3,5	4,0	dB
Amplitude ripple in passband (p-p) 890,0 MHz ... 915,0 MHz	$\Delta\alpha$	—	1,0	1,5	dB
Relative attenuation (relative to α_{max})	α_{rel}				
0,0 MHz ... 600,0 MHz		40	74	—	dB
600,0 MHz ... 870,0 MHz		25	34	—	dB
925,0 MHz ... 935,0 MHz		3,5	10	—	dB
935,0 MHz ... 990,0 MHz		20	26	—	dB
990,0 MHz ... 1500,0 MHz		40	54	—	dB
1500,0 MHz ... 3000,0 MHz		20	38	—	dB

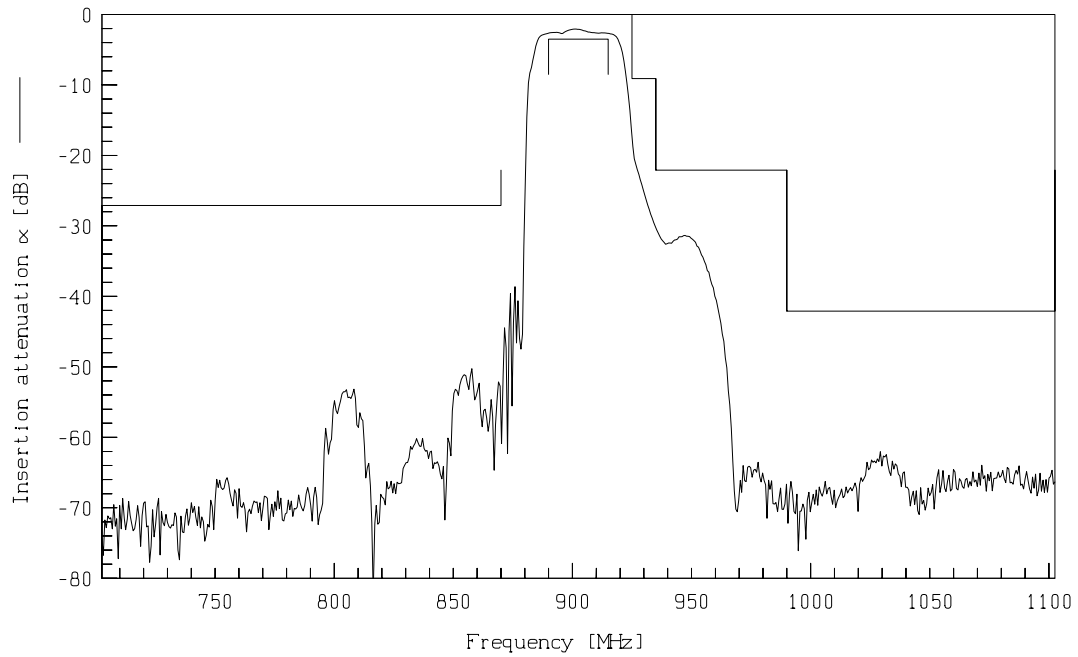


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Transfer function



Transfer function (wideband)

