



# SAW Components

Data Sheet B3856





**SAW Components**

**B3856**

**Vestigial Sideband Filter**

**45,75 MHz**

**Data Sheet**

**Standard**

- M/N USA

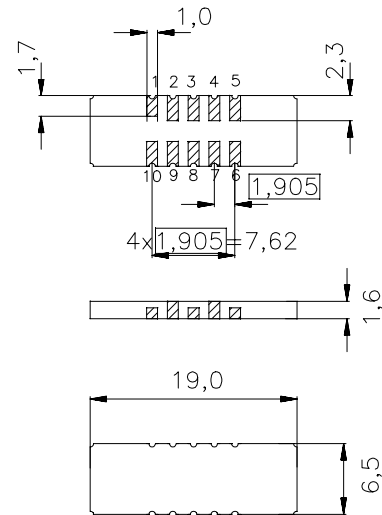
**Features**

- Vestigial sideband filter with sound
- Group delay predistortion
- Hermetically sealed ceramic package

**Terminals**

- Gold plated

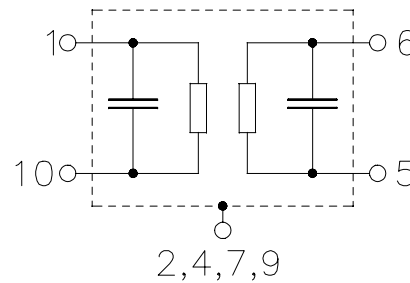
**Ceramic package DCC18**



Dimensions in mm, approx. weight 0,8 g

**Pin configuration**

- 1 Input
- 10 Input – ground
- 6 Output
- 5 Output – ground
- 2, 4, 7, 9 Case – ground
- 3, 8 Must be grounded



Type	Ordering code	Marking and Package according to	Packing according to
B3856	B39460-B3856-U210	C61157A0007A054	F61074V8081Z000

Electrostatic Sensitive Device (ESD)

**Maximum ratings**

Operable temperature range	$T$	- 40/+ 85	°C	
Storage temperature range	$T_{stg}$	- 40/+ 85	°C	
DC voltage	$V_{DC}$	0	V	
Source power	$P_s$	15	dBm	source impedance 50 $\Omega$


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**Characteristics**

Operating temperature:  $T = 50\text{ °C}$  (see annotation)  
 Terminating source impedance:  $Z_S = 50\ \Omega$   
 Terminating load impedance:  $Z_L = 50\ \Omega$   
 Group delay aperture: 80 kHz

		min.	typ.	max.	
<b>Nominal frequency</b>	$f_N$	—	45,75	—	MHz
<b>Insertion attenuation at <math>f_N</math></b>	$\alpha_N$	—	33,5	34,5	dB
<b>Amplitude ripple (p-p)</b>	$\Delta\alpha$				
	41,55 ... 46,25 MHz	—	0,4	1,0	dB
<b>Relative attenuation (relative to <math>\alpha_N</math>)</b>	$\alpha_{rel}$				
	41,25 MHz	—	0,0	1,0	dB
	46,50 MHz	—	1,5	2,5	dB
	47,00 MHz	12,0	17,0	—	dB
	25,00 ... 39,00 MHz	36,0	43,0	—	dB
	39,00 ... 40,00 MHz	30,0	38,0	—	dB
	47,25 ... 49,00 MHz	30,0	37,0	—	dB
	49,00 ... 53,00 MHz	32,0	42,0	—	dB
	53,00 ... 59,25 MHz	36,0	46,0	—	dB
	59,25 ... 80,00 MHz	30,0	40,0	—	dB
	80,00 ... 100,00 MHz	16,0	19,0	—	dB
<b>Reflected wave signal suppression</b>					
	1,70 $\mu$ s ... 5,50 $\mu$ s after main pulse	40,0	45,0	—	dB
	1,84 $\mu$ s ... 1,70 $\mu$ s before main pulse	45,0	51,0	—	dB
<b>Group delay at <math>f_N</math></b>	$\tau_N$	—	1,8	—	$\mu$ s
<b>Group delay (relative to <math>\tau_N</math>)</b>	$\tau_{rel}$				
	41,57 MHz	—	-340,0	—	ns
	42,17 MHz	—	-170,0	—	ns
	42,75 ... 46,50 MHz	—	0,0	$\pm 75,0$	ns
<b>Temperature coefficient of frequency</b>	$TC_f$	—	-87	—	ppm/K

Annotation:

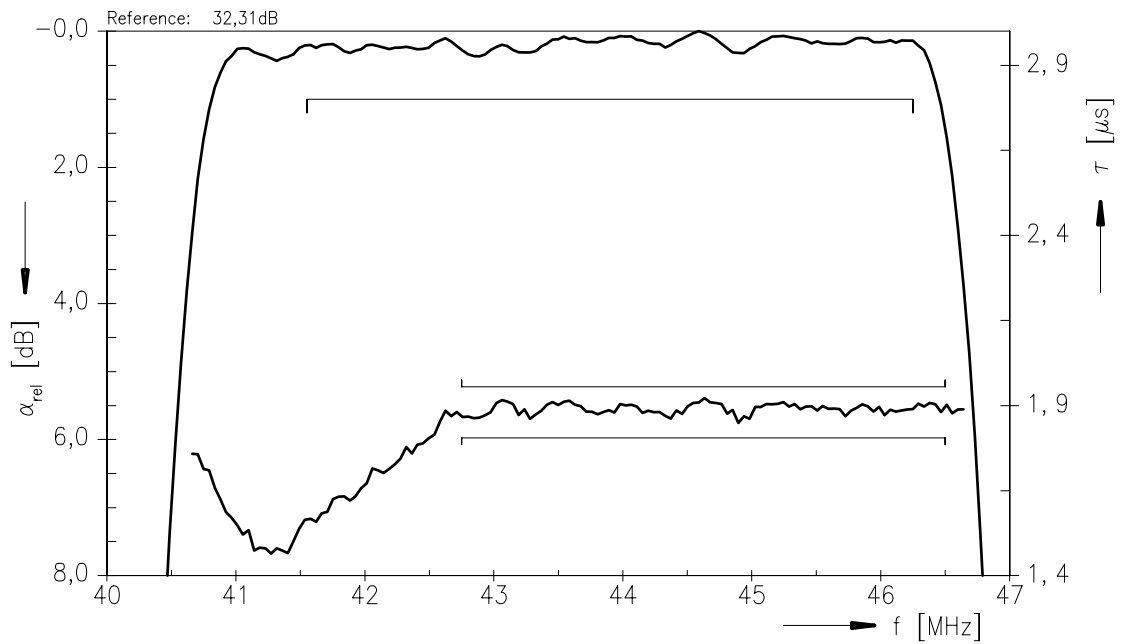
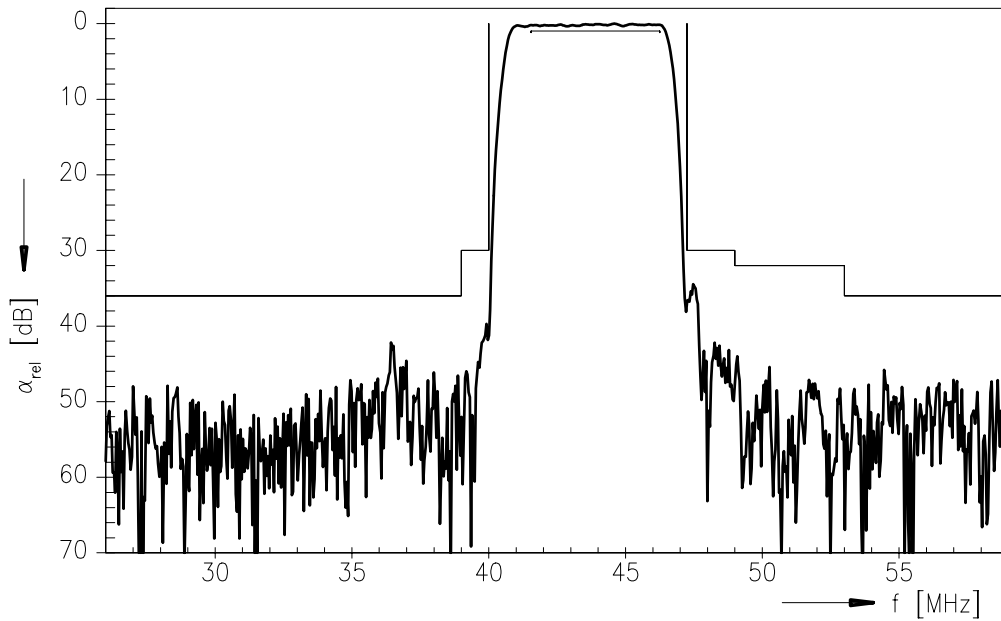
For 25°C all frequencies should be multiplied by 1,002175

e.g. 41,25 MHz (50°C)\*1,002175 = 41,3397 MHz (25°C)



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Frequency response





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