



# SAW Components

Data Sheet B 595





**SAW Components**

**B 595**

**Bandpass Filter**

**140,0 MHz**

Data Sheet

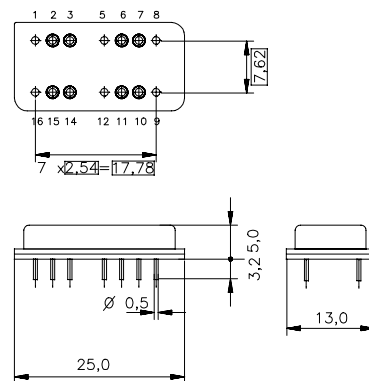
Metal package **DIP 16**

**Features**

- High performance IF bandpass filter
- Constant group delay
- Hermetically sealed metal package

**Terminals**

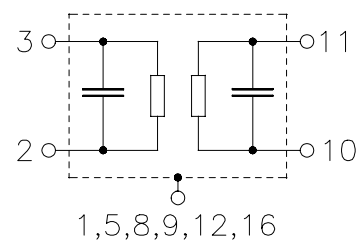
- Gold plated NiFeCo alloy



Dimensions in mm, approx. weight 4,2 g

**Pin configuration**

- |                    |                 |
|--------------------|-----------------|
| 2                  | Input - ground  |
| 3                  | Input           |
| 10                 | Output - ground |
| 11                 | Output          |
| 1, 5, 8, 9, 12, 16 | Case - ground   |
| 6, 7, 14 15        | Not connected   |



| Type  | Ordering code     | Marking and Package according to | Packing according to |
|-------|-------------------|----------------------------------|----------------------|
| B 595 | B39141-B 595-E110 | C61157-A7-A11                    | F61064-V8013-Z000    |

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:  $T = 45 \text{ }^{\circ}\text{C}$   
 Terminating source impedance:  $Z_S = 50 \text{ } \Omega$   
 Terminating load impedance:  $Z_L = 50 \text{ } \Omega$

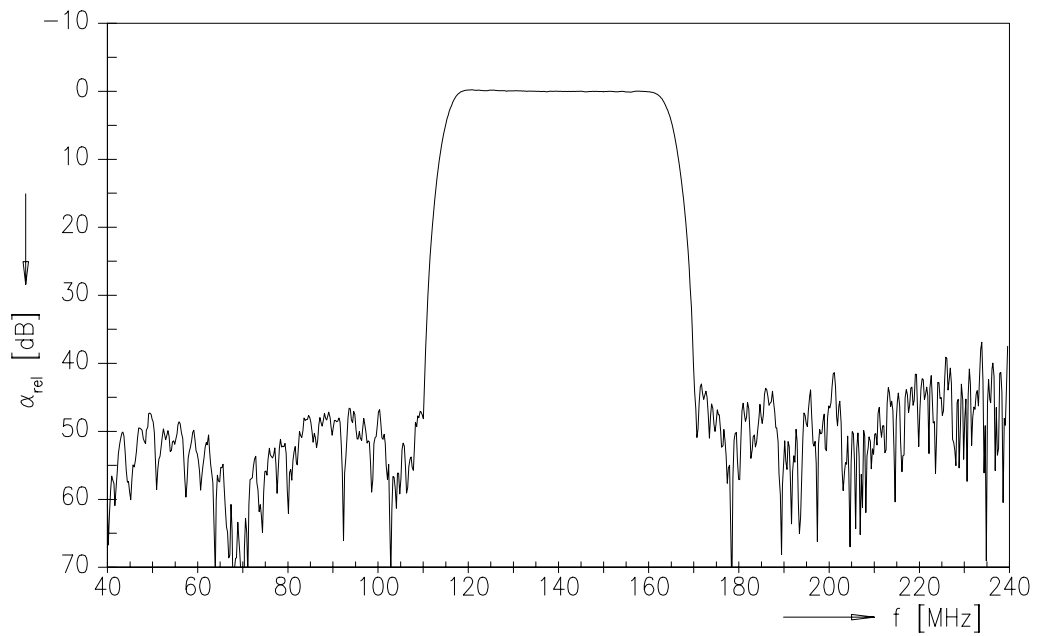
|  |                       | min.   | typ.   | max.   |               |
|--|-----------------------|--------|--------|--------|---------------|
| <b>Center frequency</b><br>(center between 6 dB points)  | $f_C$                 | 139,75 | 140,00 | 140,25 | MHz           |
| <b>Insertion attenuation at <math>f_C</math></b>   | $\alpha_C$            | —      | 30,0   | 31,0   | dB            |
| <b>Pass band tilt</b>  |                       | —      | 0,005  | —      | dB/MHz        |
| <b>Amplitude ripple (p-p)</b><br>119,0 ... 161,0 MHz   | $\Delta\alpha$        | —      | 0,3    | 0,6    | dB            |
| <b>Phase ripple (p-p)</b><br>119,0 ... 161,0 MHz   | $\Delta\alpha$        | —      | 2,3    | 4,0    | °             |
| <b>Pass bandwidth</b>  |                       |        |        |        |               |
| $\alpha_{\text{rel}} \leq 1 \text{ dB}$  | $B_{1\text{dB}}$      | 45,0   | 45,7   | 46,5   | MHz           |
| $\alpha_{\text{rel}} \leq 3 \text{ dB}$  | $B_{3\text{dB}}$      | 48,0   | 48,5   | 49,0   | MHz           |
| $\alpha_{\text{rel}} \leq 40 \text{ dB}$   | $B_{40\text{dB}}$     | —      | 59,5   | 60,0   | MHz           |
| <b>Relative attenuation (relative to <math>\alpha_C</math>)</b>  | $\alpha_{\text{rel}}$ |        |        |        |               |
| 10,0 ... 109,5 MHz   |                       | 40,0   | 46,0   | —      | dB            |
| 170,5 ... 230,0 MHz  |                       | 36,0   | 38,0   | —      | dB            |
| 230,0 ... 240,0 MHz  |                       | —      | 20,0   | —      | dB            |
| <b>Reflected wave signal suppression</b><br>0,25 $\mu\text{s}$ ... 2,25 $\mu\text{s}$ after main pulse |                       | 50,0   | 55,0   | —      | dB            |
| <b>Group delay at <math>f_C</math></b>   | $\tau_C$              | —      | 0,75   | —      | $\mu\text{s}$ |
| <b>Temperature coefficient of frequency</b>  | $TC_f$                | —      | -87    | —      | ppm/K         |



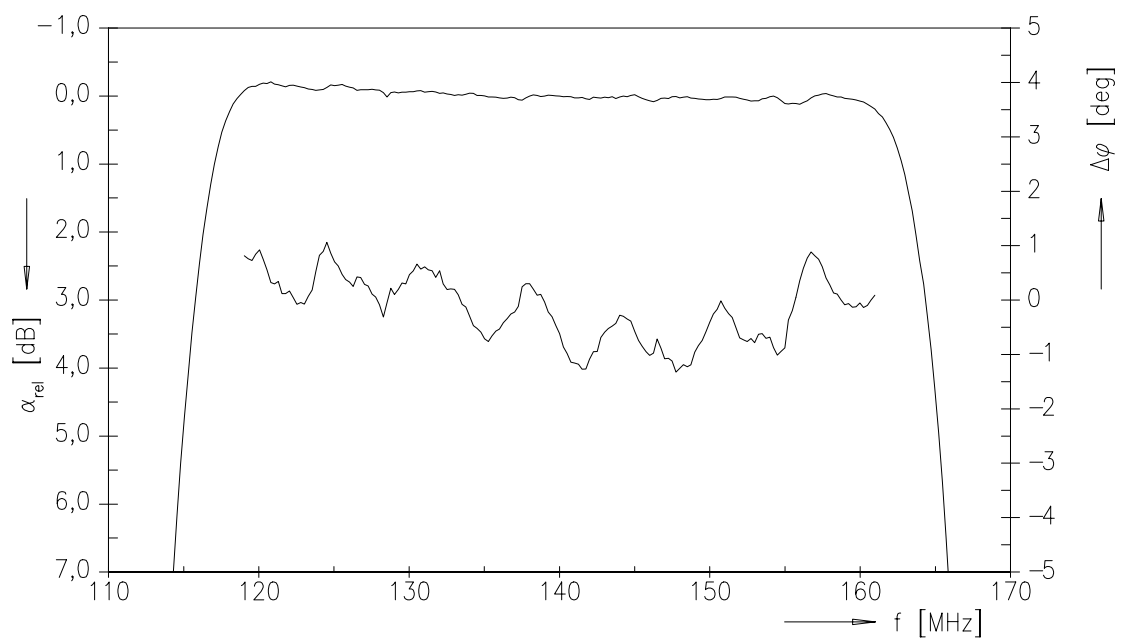


Data Sheet

Normalized frequency response



Normalized frequency response





|                        |                  |
|------------------------|------------------|
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#### Data Sheet

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