

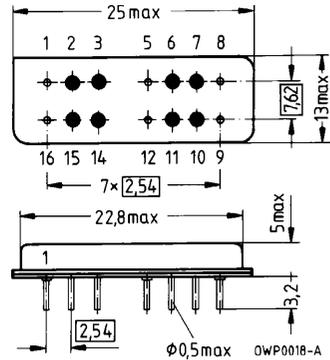
**Features**

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

**Terminals**

- Gold-plated NiFeCo alloy

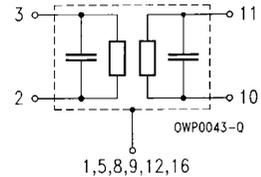
Metal package DIP 16



Dimensions in mm, approx. weight 4,2 g

**Pin configuration**

- 3 Input
- 2 Input – ground
- 11 Output
- 10 Output – ground
- 1, 5, 8, 9, 12, 16 Case – ground



Type	Ordering code	Marking
B 521	B39121-B521-E110	Type, date code, pin 1

Electrostatic Sensitive Device (ESD)

**Maximum ratings**

Ambient temperature	$T_A$	- 25/+ 85	°C	—
Storage temperature	$T_{stg}$	- 40/+ 85	°C	—
DC voltage	$V_{DC}$	0	V	—
Source power	$P_s$	15	dBm	source impedance 50 $\Omega$

**Characteristics**

Ambient temperature	$T_A = 35\text{ °C}$
Source impedance	$Z_S = 50\ \Omega$
Load impedance	$Z_L = 50\ \Omega$
Group delay aperture	200 kHz

		min.	typ.	max.	
<b>Center frequency</b> (center between 3 dB points)	$f_c$	117,80	118,00	118,20	MHz
<b>Insertion attenuation at <math>f_c</math></b>	$\alpha_c$	20,0	22,0	24,0	dB
<b>Amplitude ripple (p-p) 112,80 ... 123,00 MHz</b>		—	0,8	1,0	dB
<b>Pass bandwidth</b>					
$\alpha_{rel} \leq 1\text{ dB}$	$B_{1\text{dB}}$	10,7	10,9	11,1	MHz
$\alpha_{rel} \leq 3\text{ dB}$	$B_{3\text{dB}}$	11,8	11,9	12,0	MHz
$\alpha_{rel} \leq 40\text{ dB}$	$B_{40\text{dB}}$	15,4	15,55	15,7	MHz
<b>Relative attenuation (relative to <math>\alpha_c</math>)</b>	$\alpha_{rel}$				
100,00 ... 107,00 MHz		50,0	52,0	—	dB
107,00 ... 108,70 MHz		45,0	48,0	—	dB
108,70 ... 109,80 MHz		50,0	55,0	—	dB
126,20 ... 136,00 MHz		50,0	53,0	—	dB
<b>Reflected wave signal suppression</b> 0,9 $\mu\text{s}$ ... 4,7 $\mu\text{s}$ after main pulse		48,0	52,0	—	dB
<b>Group delay at <math>f_c</math></b>	$\tau_c$	—	1,3	—	$\mu\text{s}$
<b>Group delay ripple (p-p)</b> 112,00 ... 124,00 MHz	$\Delta\tau$	—	25	35	ns
<b>Temperature coefficient of frequency</b>	$TC_f$	—	-87	—	ppm/K

**B 521**  
**118,00 MHz**

**Frequency response**

