

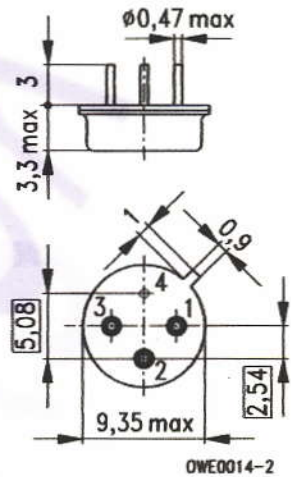
**Features**

- Two-channel satellite receiver filter
- IF filter for DSB receivers
- Constant group delay
- Improved ESD capability by integrated shunt resistors

**Terminals**

- Gold-plated NiFeCo alloy

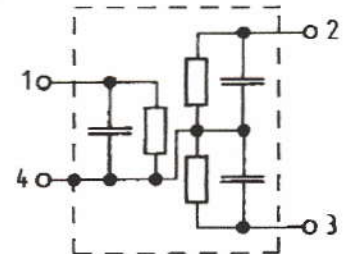
Metal package TO 39



Dimensions in mm, approx. weight 1,0 g

**Pin configuration**

- 1 Input
- 2 Output – channel 2
- 3 Output – channel 1
- 4 Ground



DWE0013-T

Type	Ordering code	Marking
B 635	B39481-B635-B210	Type, date code

Electrostatic Sensitive Device (ESD)

**Maximum ratings**

Ambient temperature	$T_A$	- 20/+ 80	°C	—
Storage temperature	$T_{stg}$	- 25/+ 85	°C	—
DC voltage	$V_{DC}$	0	V	between any terminals
AC voltage	$V_{pp}$	5	V	between any terminals

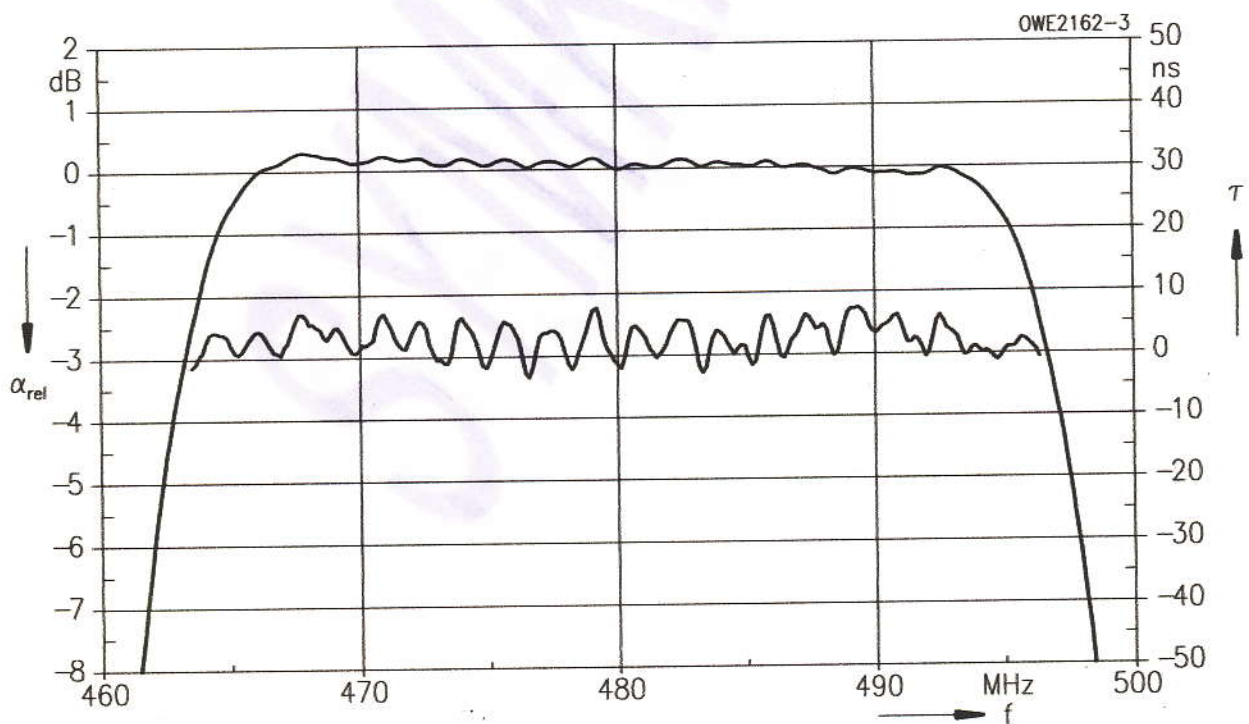
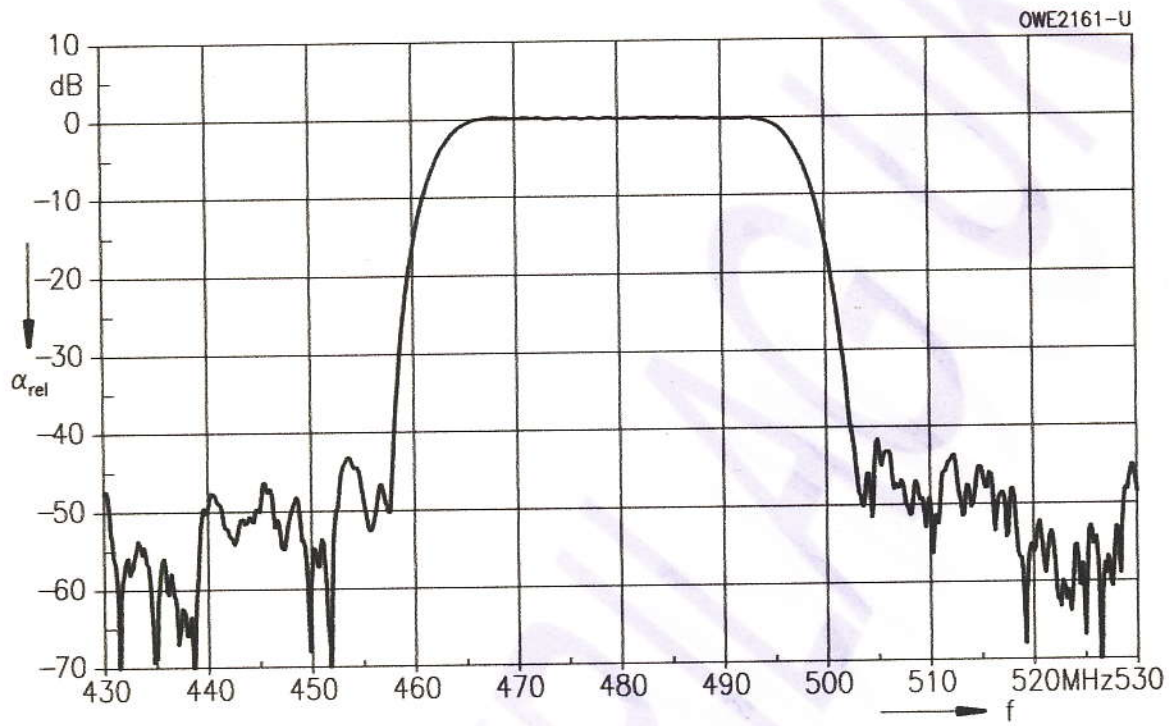
**B 635**  
**480,00 MHz**

**Characteristics of channel 1**

Ambient temperature  $T_A = 25\text{ °C}$   
 Source impedance  $Z_S = 50\ \Omega$   
 Load impedance  $Z_L = 50\ \Omega$   
 Group delay aperture 0,25 MHz

			min.	typ.	max.	
<b>Insertion attenuation</b>	480,00 MHz	$\alpha$	—	23,2	25,0	dB
Reference level for the following data						
<b>Center frequency</b>		$f_c$	479,00	480,00	481,00	MHz
<b>Pass bandwidth</b> ( $\alpha_{rel} \leq 3\text{ dB}$ )		$B_{3dB}$	—	33,50	—	MHz
<b>Relative attenuation</b>		$\alpha_{rel}$				
	463,50 MHz		—	2,2	—	dB
	496,50 MHz		—	3,0	—	dB
Lower sidelobe	430,00 ... 455,00 MHz		36,0	42,5	—	dB
Upper sidelobe	505,00 ... 530,00 MHz		36,0	43,5	—	dB
<b>Reflected wave signal suppression</b>						
	0,135 $\mu$ s ... 2,0 $\mu$ s after main pulse		40,0	45,0	—	dB
<b>Amplitude</b>						
Amplitude ripple (p-p)	470,50 ... 489,50 MHz	$\Delta\alpha$	—	0,2	0,6	dB
<b>Group delay</b>	480,00 MHz	$\tau$	—	300	—	ns
Group delay ripple (p-p)	464,00 ... 496,00 MHz	$\Delta\tau$	—	9	18	ns
<b>Impedance at 480,00 MHz</b>						
	Input: $Z_{IN} = R_{IN} \parallel C_{IN}$		—	60 $\parallel$ 5,3	—	$\Omega \parallel$ pF
	Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$		—	230 $\parallel$ 3,8	—	$\Omega \parallel$ pF
<b>DC resistance</b>						
	Input: $R_{IN}$		—	250	—	$\Omega$
	Output: $R_{OUT}$		—	500	—	$\Omega$
<b>Temperature coefficient of frequency</b>		$TC_f$	—	-86	—	ppm/K

Frequency response





**B 635**  
**480,00 MHz**

**Characteristics of channel 2**

Ambient temperature  $T_A = 25\text{ °C}$   
 Source impedance  $Z_S = 50\ \Omega$   
 Load impedance  $Z_L = 50\ \Omega$   
 Group delay aperture 0,25 MHz

			min.	typ.	max.	
<b>Insertion attenuation</b>	480,00 MHz	$\alpha$	—	22,2	25,0	dB
Reference level for the following data						
<b>Center frequency</b>		$f_c$	479,00	480,00	481,00	MHz
<b>Pass bandwidth</b> ( $\alpha_{rel} \leq 3\text{ dB}$ )		$B_{3dB}$	—	36,10	—	MHz
<b>Relative attenuation</b>		$\alpha_{rel}$				
	462,00 MHz		—	2,7	—	dB
	498,00 MHz		—	3,1	—	dB
Lower sidelobe	430,00 ... 453,50 MHz		36,0	47,0	—	dB
Upper sidelobe	506,50 ... 530,00 MHz		36,0	45,0	—	dB
<b>Reflected wave signal suppression</b>						
0,13 $\mu$ s ... 2,0 $\mu$ s after main pulse			40,0	45,0	—	dB
<b>Amplitude</b>						
Amplitude ripple (p-p)	469,00 ... 491,00 MHz	$\Delta\alpha$	—	0,4	0,7	dB
<b>Group delay</b>	480,00 MHz	$\tau$	—	300	—	ns
Group delay ripple (p-p)	462,50 ... 497,50 MHz	$\Delta\tau$	—	10	18	ns
<b>Impedance at 480,00 MHz</b>						
Input:	$Z_{IN} = R_{IN} \parallel C_{IN}$		—	60 $\parallel$ 5,3	—	$\Omega \parallel$ pF
Output:	$Z_{OUT} = R_{OUT} \parallel C_{OUT}$		—	220 $\parallel$ 4,3	—	$\Omega \parallel$ pF
<b>DC Resistance</b>						
Input:	$R_{IN}$		—	250	—	$\Omega$
Output:	$R_{OUT}$		—	500	—	$\Omega$
<b>Temperature coefficient of frequency</b>		$TC_f$	—	- 86	—	ppm/K

Frequency response

