EPCOS

SAW Components

Data Sheet

Data Sheet SMD

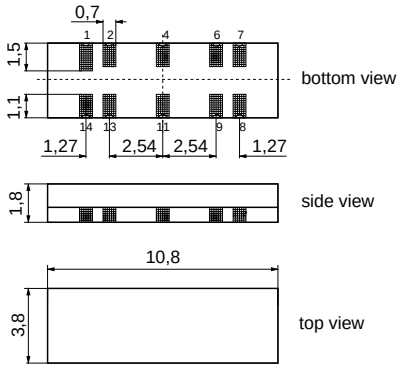
Standard

Polymer package **DOC14A**

- HDTV

Features

- Constant group delay
- Optimized for cascade of two devices
- Unbalanced input option
- **S**urface **M**ounted **T**echnology (**SMT**)



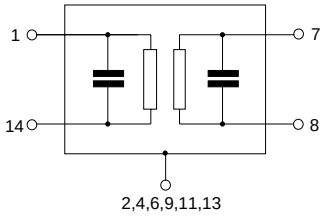
Terminals

- Gold plated

Dimensions in mm, approx. weight 0,14 g

Pin configuration

1	Input
14	Input
4,9,11,13	Case – ground
2,6	Ground
7	Output
8	Output



Type	Ordering code	Marking and package according to	Packing according to
X 7303 P	B39440-X7303-P200	C61157-A5-A1	F61074-V8188-Z000

Maximum ratings

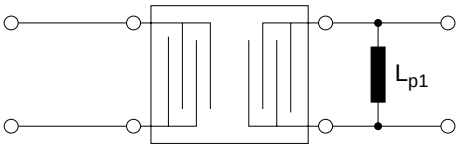
Operable temperature range	T_A	–25/+65	˚C	
Storage temperature range	T_{stg}	–40/+85	˚C	
DC voltage	V_{DC}	0	V	between any terminals
AC voltage	V_{pp}	10	V	between any terminals

Characteristics

Reference temperature: T_A = 25 °C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 2 kΩ || 3 pF and matching network

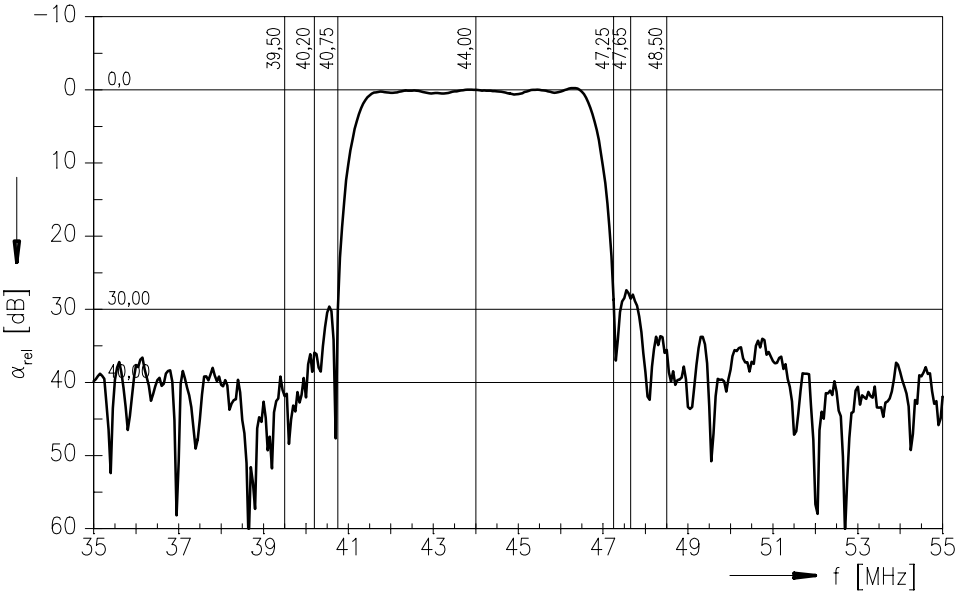
				min.	typ.	max.	
Insertion attenuation			α				
Reference level for the following data	44,00	MHz		18,0	19,5	21,0	dB
Amplitude ripple (p-p)			Δα				
	41,60 ... 46,40	MHz		—	1,0	—	dB
Relative attenuation			α_{rel}				
	40,75	MHz		22,0	28,0	—	dB
	41,35	MHz		0,9	1,9	2,9	dB
	41,60	MHz		–0,7	0,3	1,3	dB
	46,40	MHz		–1,0	0,0	1,0	dB
	46,65	MHz		0,9	1,9	2,9	dB
	47,25	MHz		22,0	29,0	—	dB
Lower sidelobe	35,00 ... 39,50	MHz		28,0	34,0	—	dB
	39,50 ... 40,20	MHz		29,0	35,0	—	dB
Upper sidelobe	47,65 ... 48,50	MHz		24,0	29,0	—	dB
	48,50 ... 55,00	MHz		29,0	35,0	—	dB
Reflected wave signal suppression							
1,5 µs ... 6,0 µs after main pulse (test pulse 250 ns, carrier frequency 44,00 MHz)				42,0	54,0	—	dB
Group delay ripple (p-p)			Δτ				
	41,35 ... 46,65	MHz		—	70	—	ns
Impedance at 44,00 MHz							
Input: $Z_{IN} = R_{IN} \parallel C_{IN}$				—	3,6 ‖ 14,7	—	kΩ ‖ pF
Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$				—	8,8 ‖ 4,3	—	kΩ ‖ pF
Temperature coefficient of frequency			TC_f	—	–18	—	ppm/K

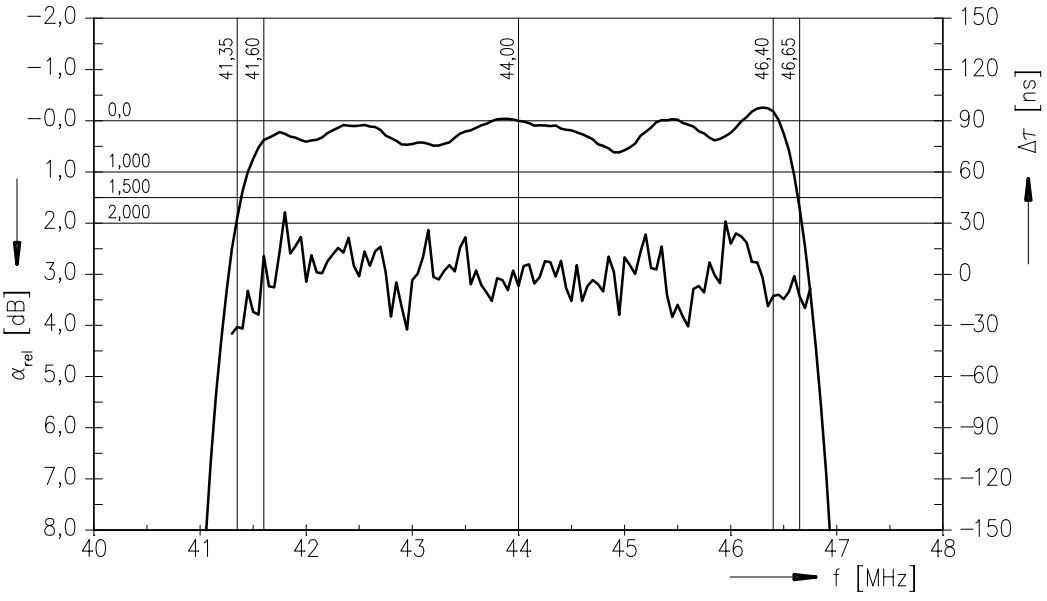
Matching network:



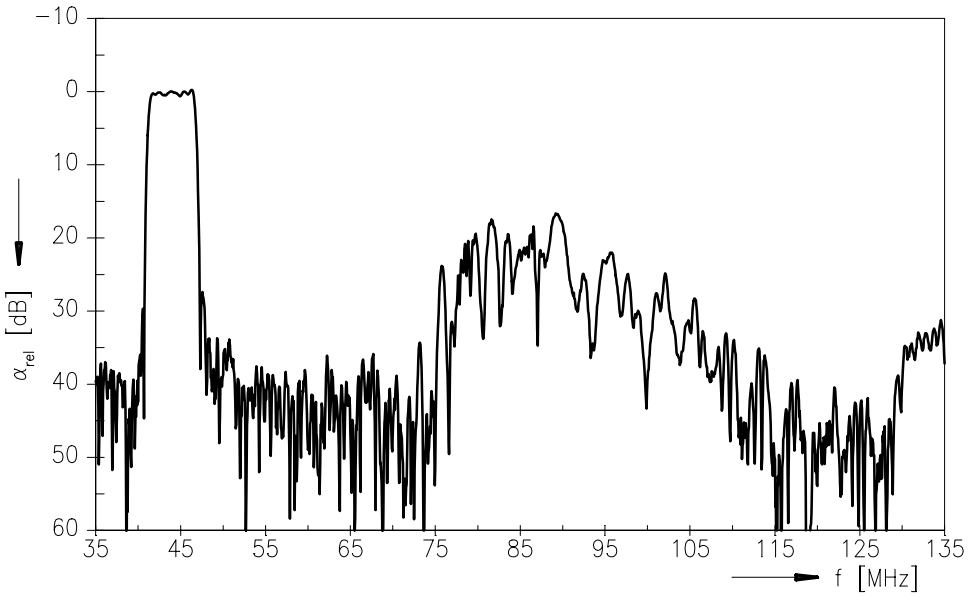
L_{p1} = 1800 nH

Frequency response

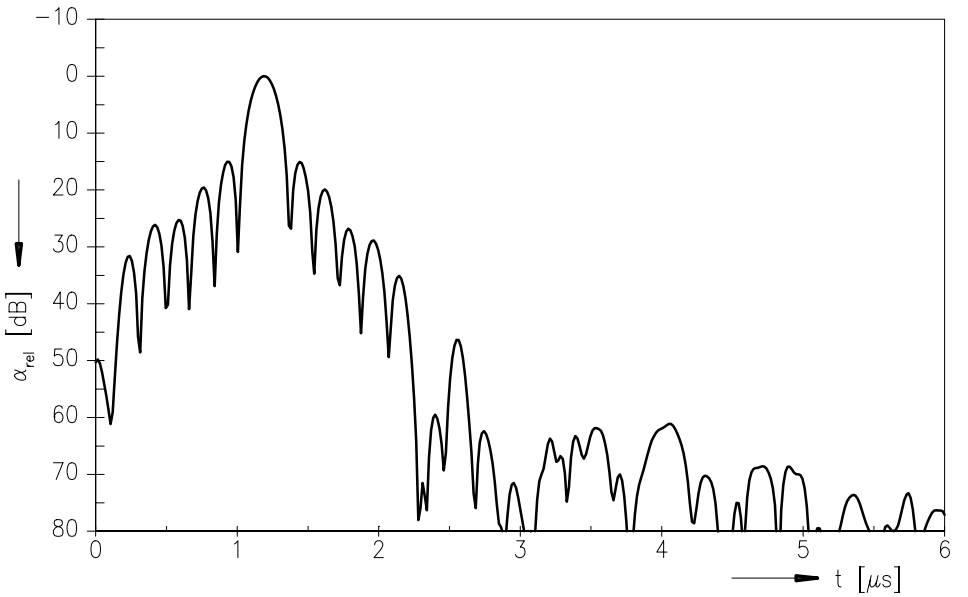




Frequency response



Time domain response



Published by EPCOS AG
Surface Acoustic Wave Components Division, SAW CE MM PD
P.O. Box 80 17 09, D-81617 München

Purchase orders are subject to the General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry recommended by the ZVEI (German Electrical and Electronic Manufacturers' Association), unless otherwise agreed.

This brochure replaces the previous edition.

For questions on technology, prices and delivery please contact the Sales Offices of EPCOS AG or the international Representatives.

Due to technical requirements components may contain dangerous substances. For information on the type in question please also contact one of our Sales Offices.