



SAW Components

Data Sheet K 6259 K

Data Sheet

An abstract, grayscale graphic featuring a stylized, three-dimensional representation of the EPCOS logo. The letters "EPCOS" are rendered in a bold, sans-serif font, appearing to be part of a larger, curved structure that resembles a globe or a stylized wave. The background is dark and textured, with light reflecting off the surfaces of the logo.



SAW Components

K 6259 K

IF Filter for Intercarrier/Multistandard Applications

38,90 MHz

Data Sheet

Standard

- D/K
- M/N

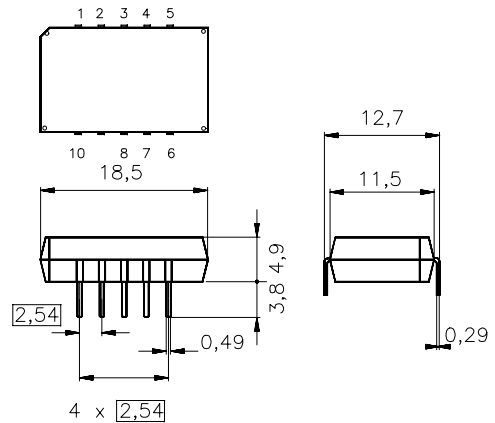
Features

- TV IF filter switchable from M/N mode to D/K mode
- M/N mode with Nyquist slope and sound shelf at 34,40 MHz
- Constant group delay
- D/K mode with Nyquist slope and broad sound shelf for sound carriers at 32,40 MHz and 33,40 MHz
- Group delay predistortion

Terminals

- Tinned CuFe alloy

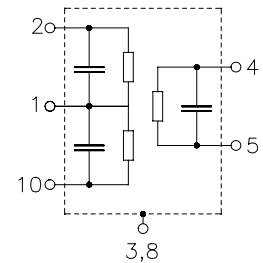
Plastic package **DIP10K**



Dimensions in mm, approx. weight 1,8 g

Pin configuration

- | | |
|------|-----------------------|
| 1 | Input |
| 2 | Input - ground |
| 3; 8 | Chip carrier - ground |
| 4; 5 | Output |
| 6; 7 | Not connected |
| 9 | Free |
| 10 | Switching input |



Type	Ordering code	Marking and package according to	Packing according to
K 6259 K	B39389-K6259-K100	C61157-A2-A3	F61074-V8068-Z000

Maximum ratings

Operable temperature range	T_A	-25/+65	°C	between any terminals
Storage temperature range	T_{stg}	-40/+85	°C	
DC voltage	V_{DC}	12	V	
AC voltage	V_{pp}	10	V	



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Characteristics in M/N mode (switching input pin 10 connected to input pin 1)

Reference temperature: $T_A = 25\text{ °C}$
Terminating source impedance: $Z_S = 50\text{ }\Omega$
Terminating load impedance: $Z_L = 2\text{ k}\Omega \parallel 3\text{ pF}$

		min.	typ.	max.	
Insertion attenuation α					
Reference level for the following data	37,40 MHz	15,2	16,7	18,2	dB
Relative attenuation α_{rel}					
Picture carrier	38,90 MHz	5,0	6,0	7,0	dB
Color carrier	35,32 MHz	0,8	1,8	2,8	dB
Sound carrier	34,40 MHz	16,9	18,4	19,9	dB
Adjacent picture carrier	32,90 MHz	40,0	54,0	—	dB
Adjacent sound carrier	40,40 MHz	41,0	50,0	—	dB
Lower sidelobe	25,00 ... 32,90 MHz	33,0	38,0	—	dB
Upper sidelobe	40,40 ... 45,00 MHz	36,0	43,0	—	dB
Reflected wave signal suppression					
1,2 μ s ... 6,0 μ s after main pulse (test pulse 250 ns, carrier frequency 37,40 MHz)		42,0	50,0	—	dB
Feedthrough signal suppression					
1,2 μ s ... 1,1 μ s before main pulse (test pulse 250 ns, carrier frequency 37,40 MHz)		—	56,0	—	dB
Group delay ripple (p-p) $\Delta\tau$		—	40	—	ns
Impedance at 37,40 MHz					
Input: $Z_{IN} = R_{IN} \parallel C_{IN}$		—	1,2 \parallel 17,2	—	k Ω \parallel pF
Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$		—	1,4 \parallel 6,0	—	k Ω \parallel pF
Temperature coefficient of frequency TC_f		—	-72	—	ppm/K



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Characteristics in D/K mode (switching input pin 10 connected to ground input pin 2)

Reference temperature:	$T_A = 25\text{ °C}$
Terminating source impedance:	$Z_S = 50\text{ }\Omega$
Terminating load impedance:	$Z_L = 2\text{ k}\Omega \parallel 3\text{ pF}$

		min.	typ.	max.	
Insertion attenuation α					
Reference level for the following data	37,40 MHz	15,9	17,4	18,9	dB
Relative attenuation α_{rel}					
Picture carrier	38,90 MHz	5,1	6,1	7,1	dB
Color carrier	34,47 MHz	-0,7	0,3	1,3	dB
Sound carrier	32,40 MHz	15,2	16,7	18,2	dB
	33,40 MHz	16,1	17,6	19,1	dB
Adjacent picture carrier	30,90 MHz	44,0	56,0	—	dB
Adjacent sound carrier	40,40 MHz	41,0	50,0	—	dB
Lower sidelobe	25,00 ... 30,90 MHz	37,0	45,0	—	dB
Upper sidelobe	40,40 ... 45,00 MHz	35,0	41,0	—	dB
Reflected wave signal suppression					
1,2 μ s ... 6,0 μ s after main pulse (test pulse 250 ns, carrier frequency 37,40 MHz)		42,0	51,0	—	dB
Feedthrough signal suppression					
1,2 μ s ... 1,1 μ s before main pulse (test pulse 250 ns, carrier frequency 37,40 MHz)		—	56,0	—	dB
Group delay predistortion $\Delta\tau$					
(reference frequency 38,90 MHz)					
	37,10 MHz	—	-75	—	ns
	34,47 MHz	—	20	—	ns
Impedance at 37,40 MHz					
Input: $Z_{IN} = R_{IN} \parallel C_{IN}$		—	0,7 \parallel 26,4	—	k Ω \parallel pF
Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$		—	1,4 \parallel 6,0	—	k Ω \parallel pF
Temperature coefficient of frequency TC_f					
		—	-72	—	ppm/K



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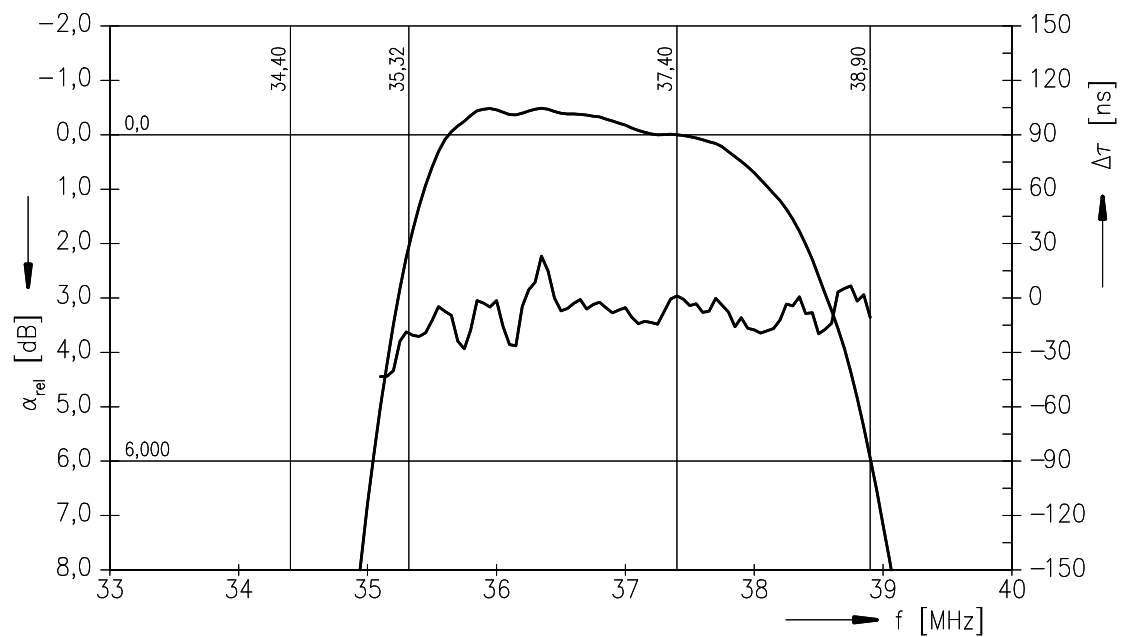
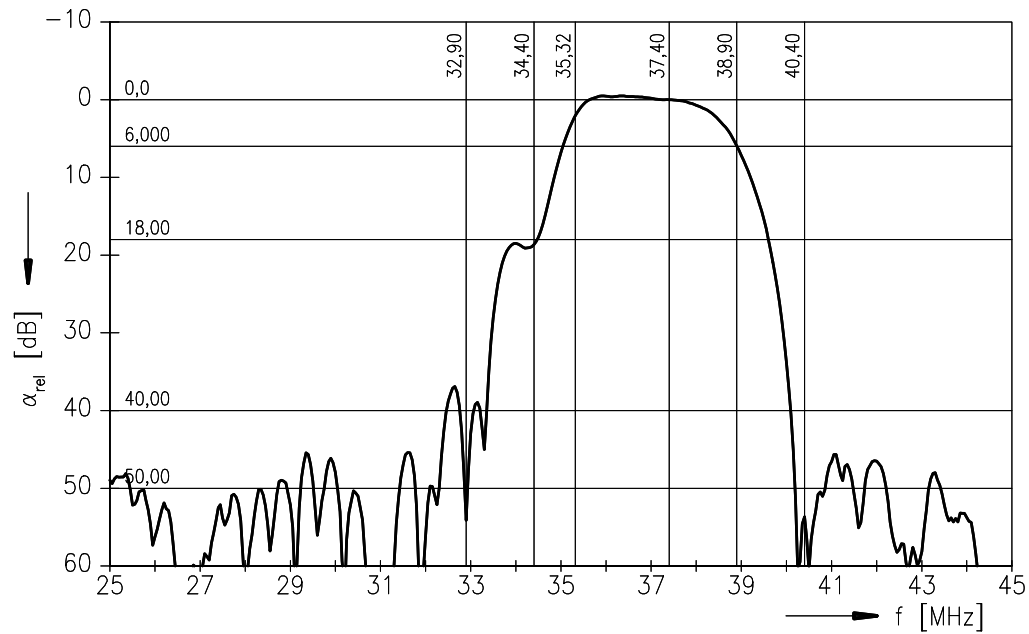
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Data Sheet

Frequency response M/N mode (switching input pin 10 connected to input pin 1)





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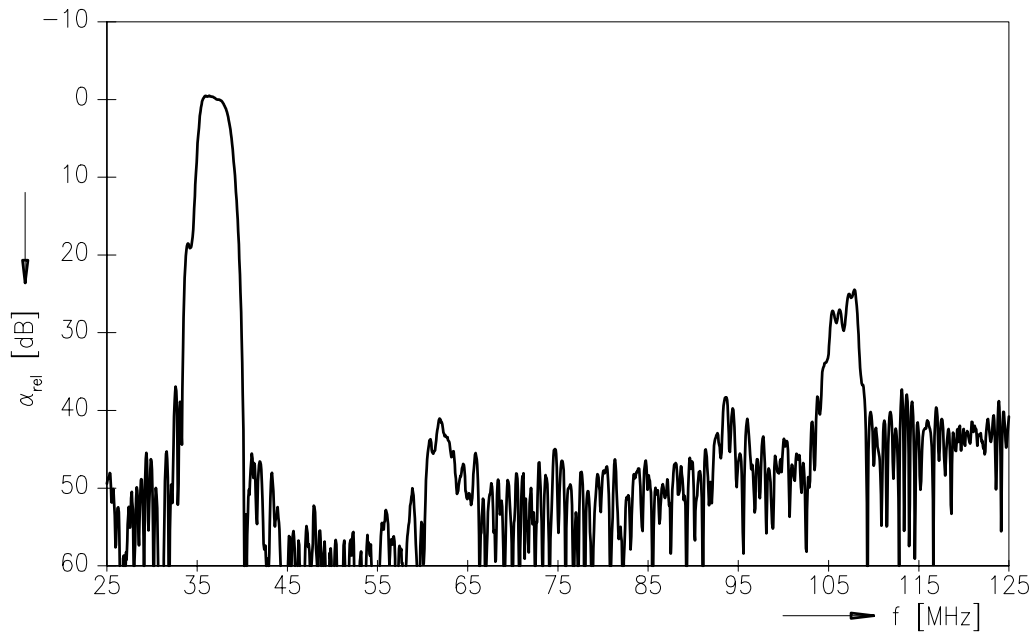
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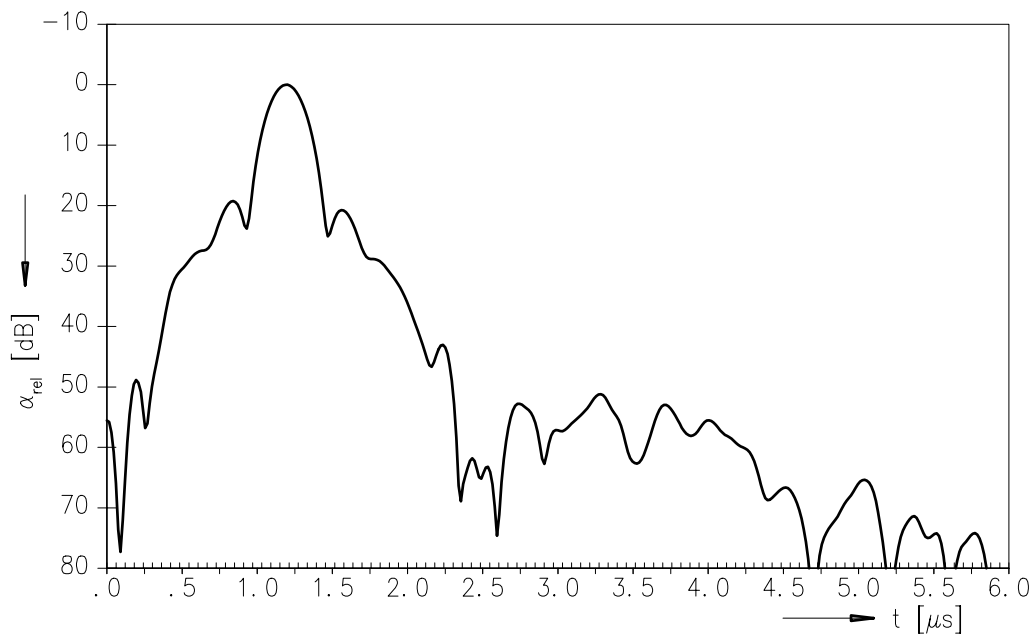
38,90 MHz

Data Sheet

Frequency response M/N mode (switching input pin 10 connected to input pin 1)



Time domain response M/N mode





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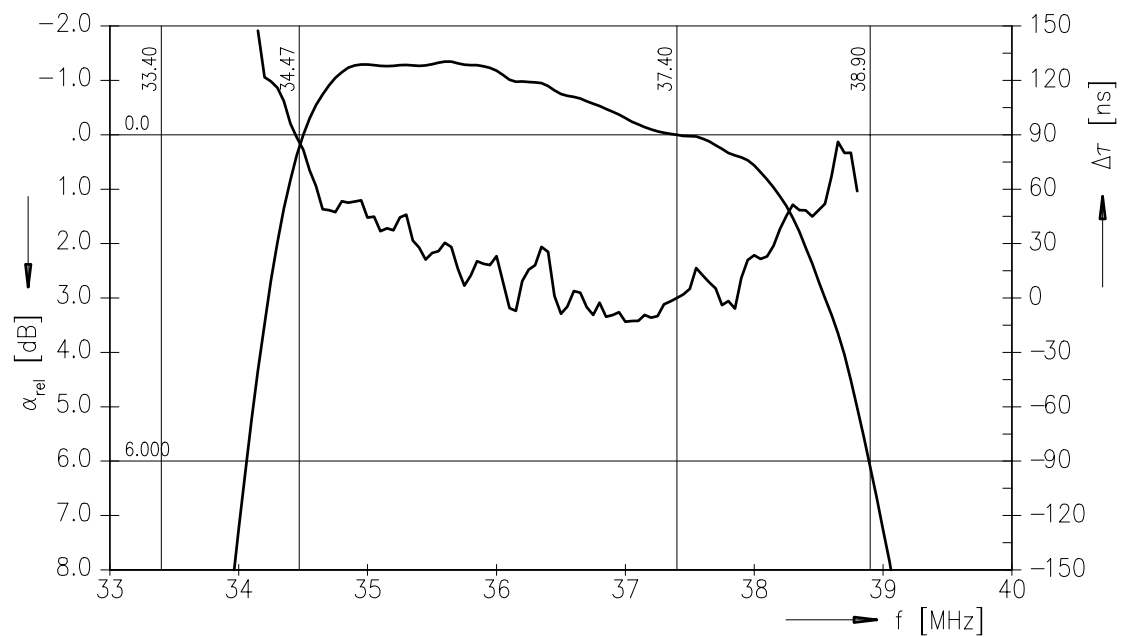
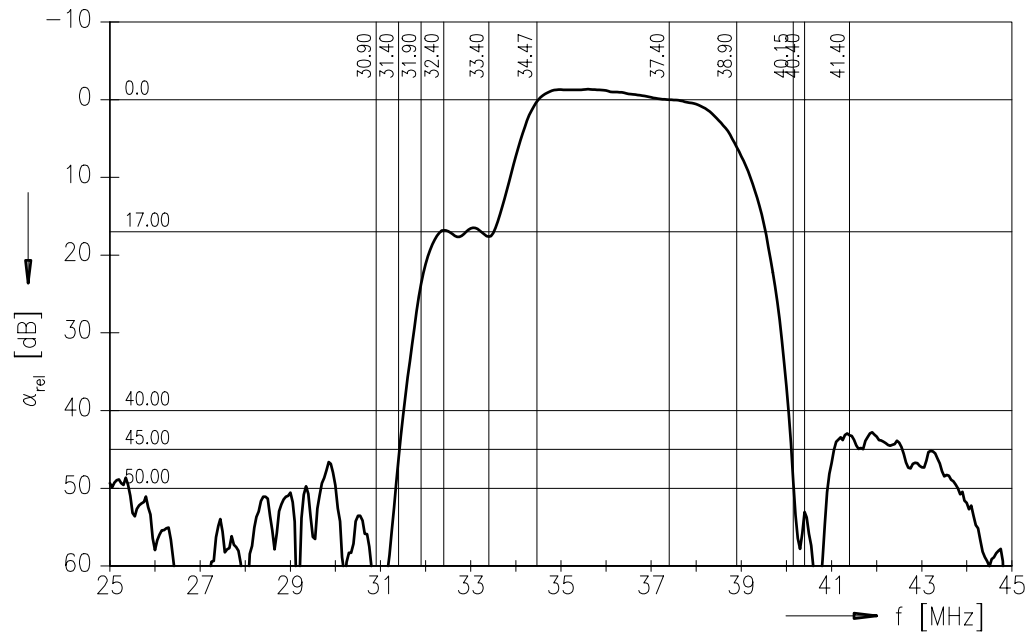
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Data Sheet

Frequency response D/K mode (switching input pin 10 connected to ground input pin 2)





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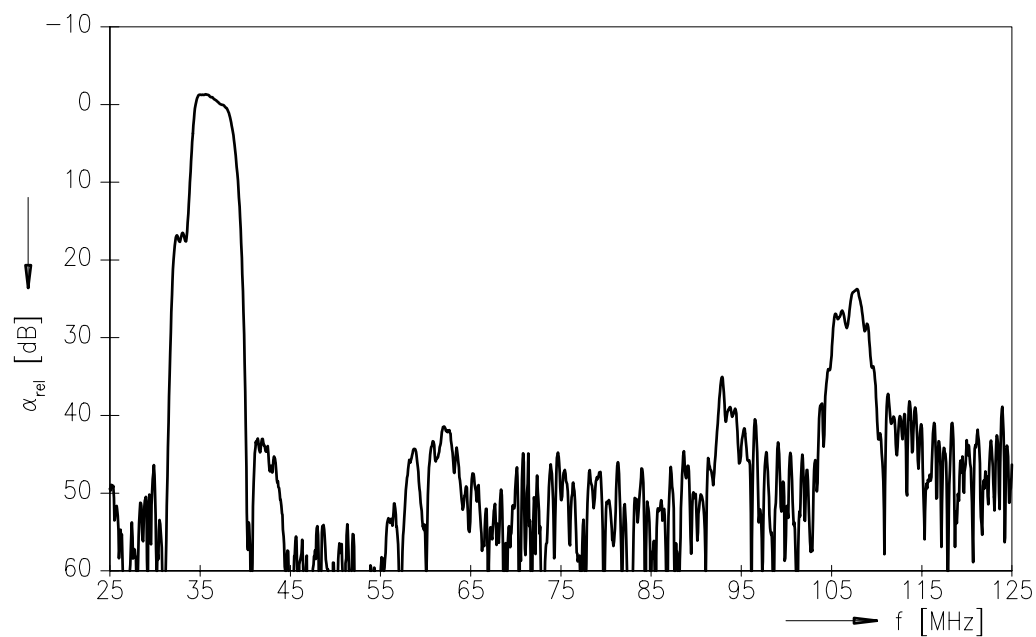
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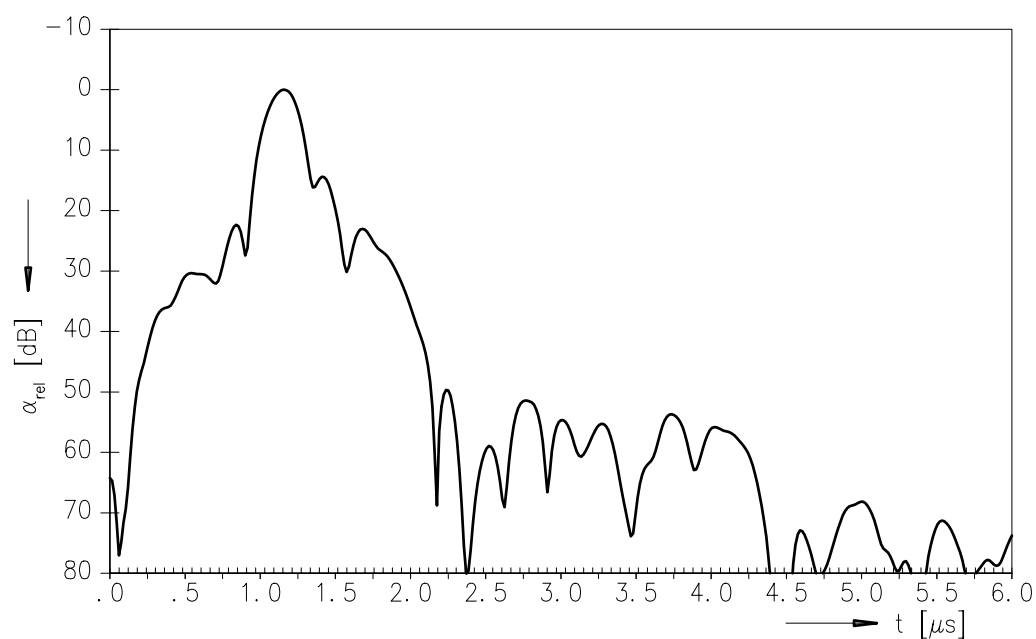
38,90 MHz

Data Sheet

Frequency response D/K mode (switching input pin 10 connected to ground input pin 2)



Time domain response D/K mode





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Published by EPCOS AG
Surface Acoustic Wave Components Division, OFW E UE
P.O. Box 80 17 09, D-81617 München

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