



SAW multimedia filters

Series/Type: X7266D

The following products presented in this data sheet are being withdrawn.

Ordering Code	Substitute Product	Date of Withdrawal	Deadline Last Orders	Last Shipments
B39360X7266N201		2011-01-14	2011-09-30	2012-09-30

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SAW Components

X 7266 D

SAW bandpass filter

36.00 MHz

Data Sheet

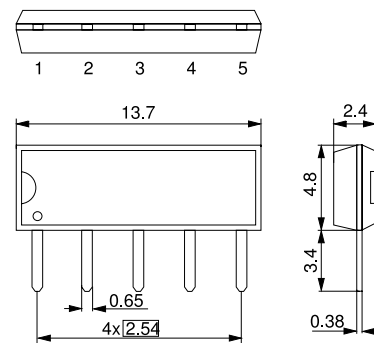
Application

- IF filter for digital TV
- Switchable between usable bandwidths of 7.4MHz and 6.4MHz
- Constant group delay



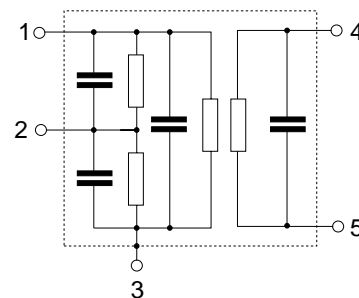
Features

- Duroplast package **SIP5D**
- Standard IC package
- Approximate weight 0.5 g
- RoHS compatible
- Tinned CuFe alloy terminals



Pin configuration

- 1 Input
- 2 Switching input
- 3 Chip carrier - ground
- 4 Output
- 5 Output



Please read *cautions and warnings and important notes* at the end of this document.



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Data Sheet

Characteristics in channel 1 (switching pin 2 connected to ground)

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

			min.	typ. @ 25 °C	max.	
Center frequency (center between 10 dB points)	f_C		—	36.0	—	MHz
Insertion attenuation Reference level for the following data	α	36.00 MHz	19.8	21.3	22.8	dB
Pass bandwidth						
$\alpha_{\text{rel}} \leq 1.5\ \text{dB}$	$B_{1.5\text{dB}}$		—	7.0	—	MHz
$\alpha_{\text{rel}} \leq 3.0\ \text{dB}$	$B_{3\text{dB}}$		—	7.3	—	MHz
$\alpha_{\text{rel}} \leq 15.0\ \text{dB}$	$B_{15\text{dB}}$		—	8.4	—	MHz
$\alpha_{\text{rel}} \leq 30.0\ \text{dB}$	$B_{30\text{dB}}$		—	9.0	—	MHz
Relative attenuation	α_{rel}					
Adjacent picture carrier		30.75 MHz	36.0	42.0	—	dB
Adjacent sound carrier		40.25 MHz	16.0	20.0	—	dB
		40.75 MHz	32.0	41.0	—	dB
		41.00 MHz	32.0	42.0	—	dB
		41.25 MHz	32.0	41.0	—	dB
Lower sidelobe		25.00 ... 31.30 MHz	31.0	37.0	—	dB
Upper sidelobe		40.70 ... 45.00 MHz	33.0	38.0	—	dB
Reflected wave signal suppression 1.2 μs ... 6.0 μs after main pulse (test pulse 250 ns, carrier frequency 36.00 MHz)			40.0	45.0	—	dB
Feedthrough signal suppression 1.3 μs ... 0.85 μs before main pulse (test pulse 250 ns, carrier frequency 36.00 MHz)			—	50.0	—	dB
Group delay ripple (p-p) 32.40 ... 39.60 MHz	$\Delta\tau$		—	60	—	ns
Impedance at 36.00 MHz						
Input: $Z_{\text{IN}} = R_{\text{IN}} \parallel C_{\text{IN}}$			—	3.0 \parallel 11.8	—	k Ω \parallel pF
Output: $Z_{\text{OUT}} = R_{\text{OUT}} \parallel C_{\text{OUT}}$			—	4.7 \parallel 3.0	—	k Ω \parallel pF
Temperature coefficient of frequency	TC_f		—	-72	—	ppm/K

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SAW Components	X 7266 D
SAW bandpass filter	36.00 MHz

Data Sheet

Characteristics in channel 2 (switching pin 2 connected to pin 1)

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

		min.	typ. @ 25 °C	max.	
Center frequency (center between 10 dB points)	f_C	—	36.0	—	MHz
Insertion attenuation Reference level for the following data	36.00 MHz α	19.8	21.3	22.8	dB
Pass bandwidth					
$\alpha_{rel} \leq 1.5\text{ dB}$	$B_{1.5dB}$	—	6.0	—	MHz
$\alpha_{rel} \leq 3.0\text{ dB}$	B_{3dB}	—	6.4	—	MHz
$\alpha_{rel} \leq 15.0\text{ dB}$	B_{15dB}	—	7.4	—	MHz
$\alpha_{rel} \leq 30.0\text{ dB}$	B_{30dB}	—	8.0	—	MHz
Relative attenuation	α_{rel}				
Adjacent picture carrier	31.42 MHz	34.0	41.0	—	dB
Adjacent sound carrier	39.67 MHz	11.0	16.0	—	dB
	39.92 MHz	23.0	29.0	—	dB
Lower sidelobe	25.00 ... 31.80 MHz	31.0	36.0	—	dB
Upper sidelobe	40.20 ... 45.00 MHz	31.0	36.0	—	dB
Reflected wave signal suppression 1.2 μ s ... 6.0 μ s after main pulse (test pulse 250 ns, carrier frequency 36.00 MHz)		40.0	45.0	—	dB
Feedthrough signal suppression 1.3 μ s ... 0.85 μ s before main pulse (test pulse 250 ns, carrier frequency 36.00MHz)		—	50.0	—	dB
Group delay ripple (p-p) 32.90 ... 39.10 MHz	$\Delta\tau$	—	50	—	ns
Impedance at 36.00 MHz Input: $Z_{IN} = R_{IN} \parallel C_{IN}$ Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$		—	1.7 \parallel 17.0 4.7 \parallel 3.0	—	k Ω \parallel pF k Ω \parallel pF
Temperature coefficient of frequency	TC_f	—	-72	—	ppm/K



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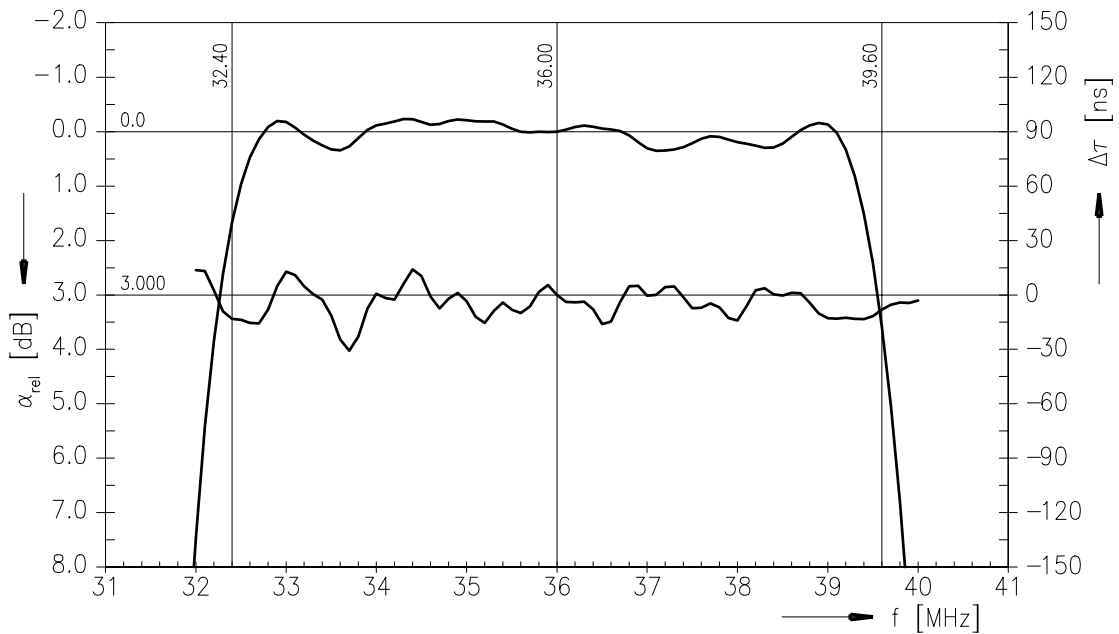
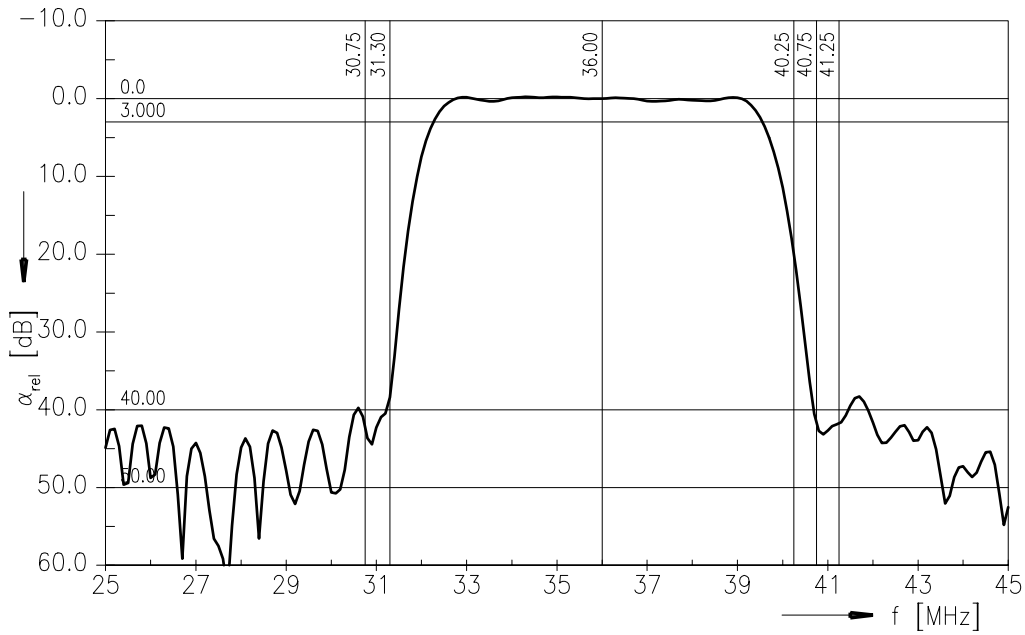
Maximum ratings

Operable temperature range	T	-25 / +65	°C	
Storage temperature range	T _{stg}	-40 / +85	°C	
DC voltage	V _{DC}	5	V	between any terminals
AC voltage	V _{pp}	10	V	between any terminals



Data Sheet

Frequency response of channel 1





SAW Components

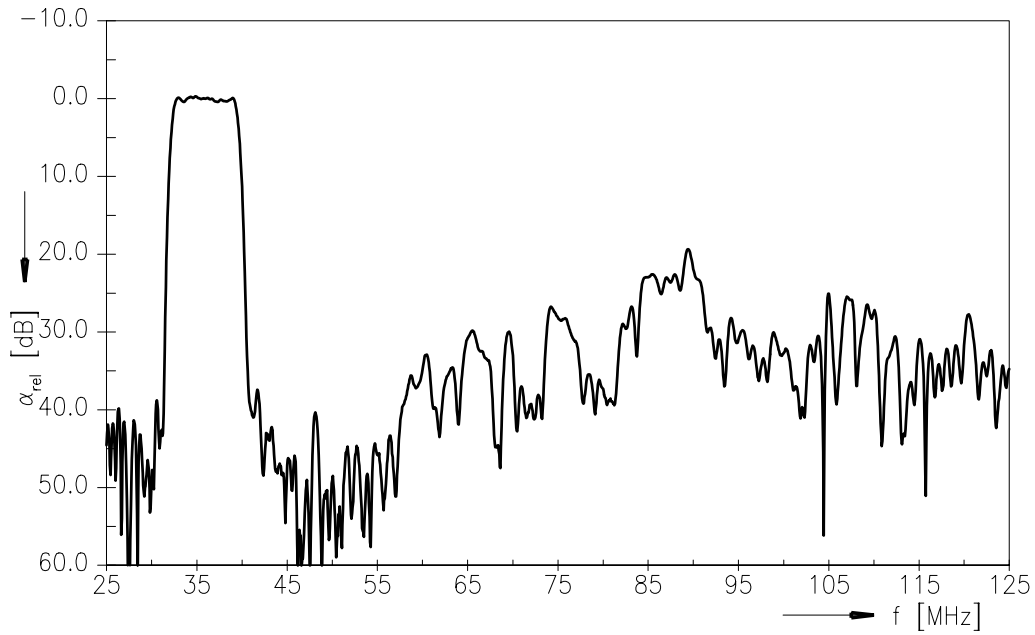
X 7266 D

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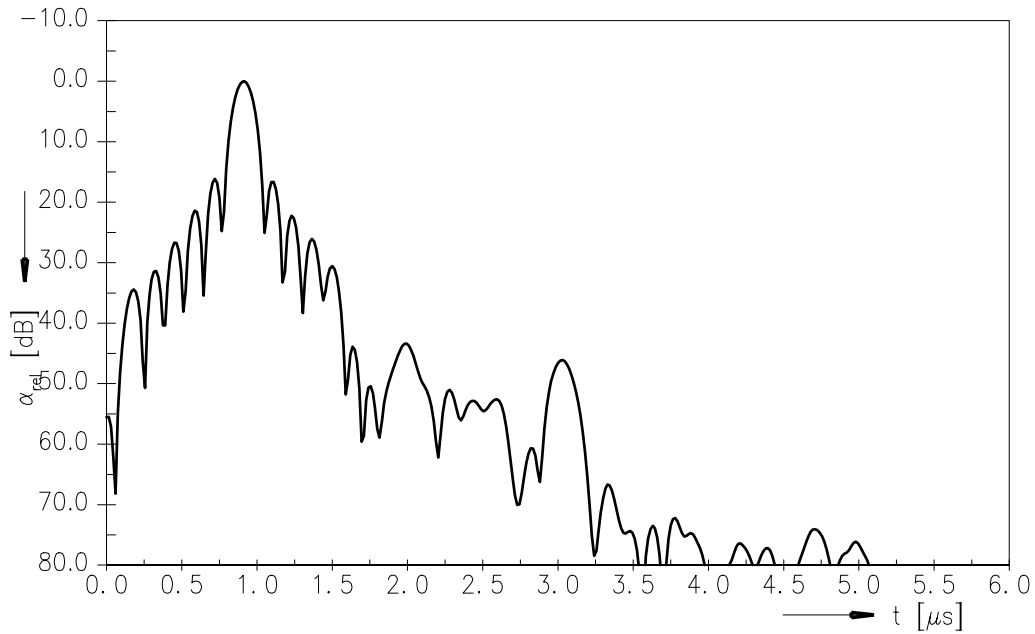
36.00 MHz

Data Sheet

Frequency response of channel 1



Time domain response of channel 1

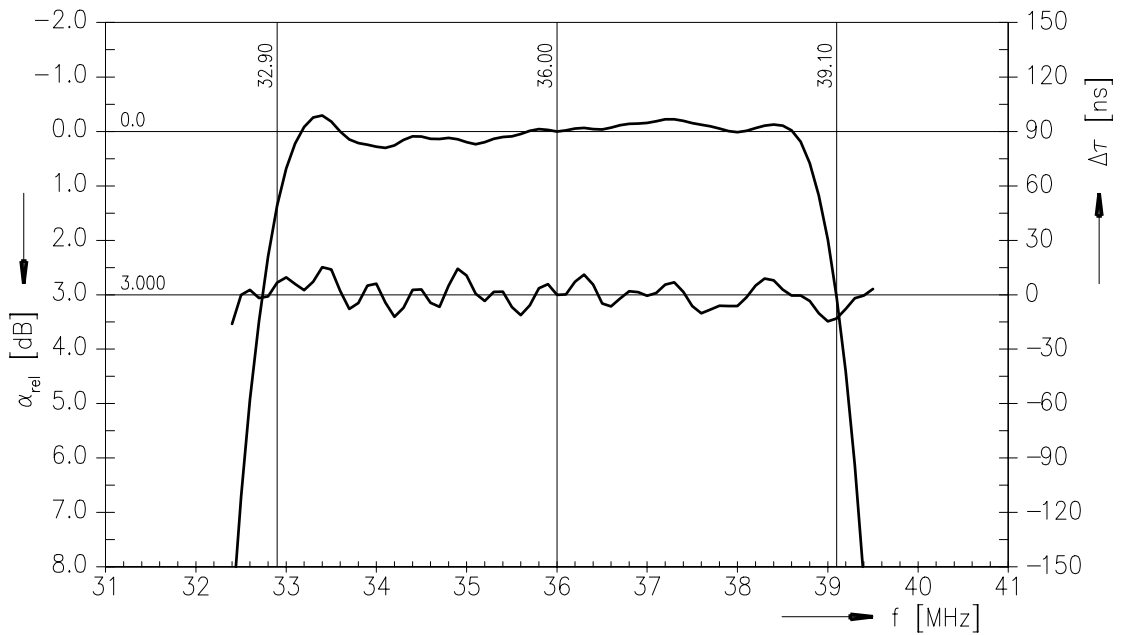
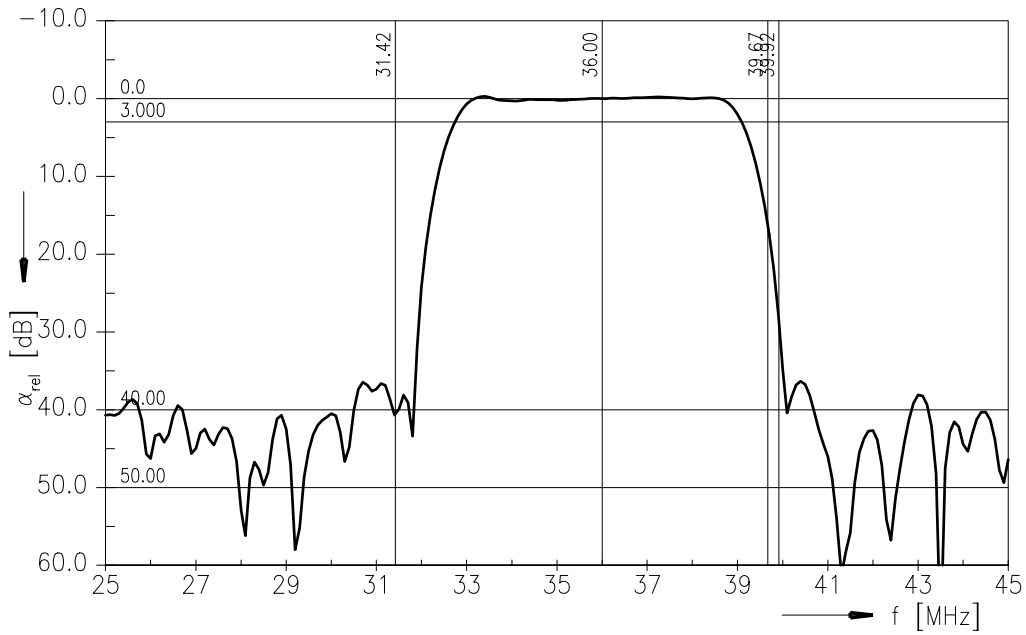


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Data Sheet

Frequency response of channel 2





SAW Components

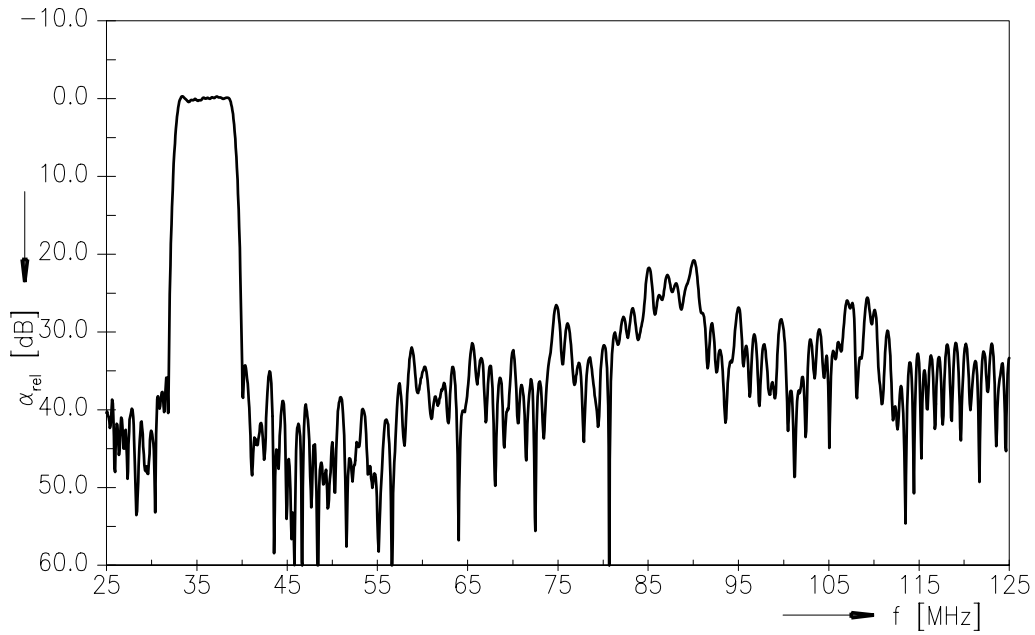
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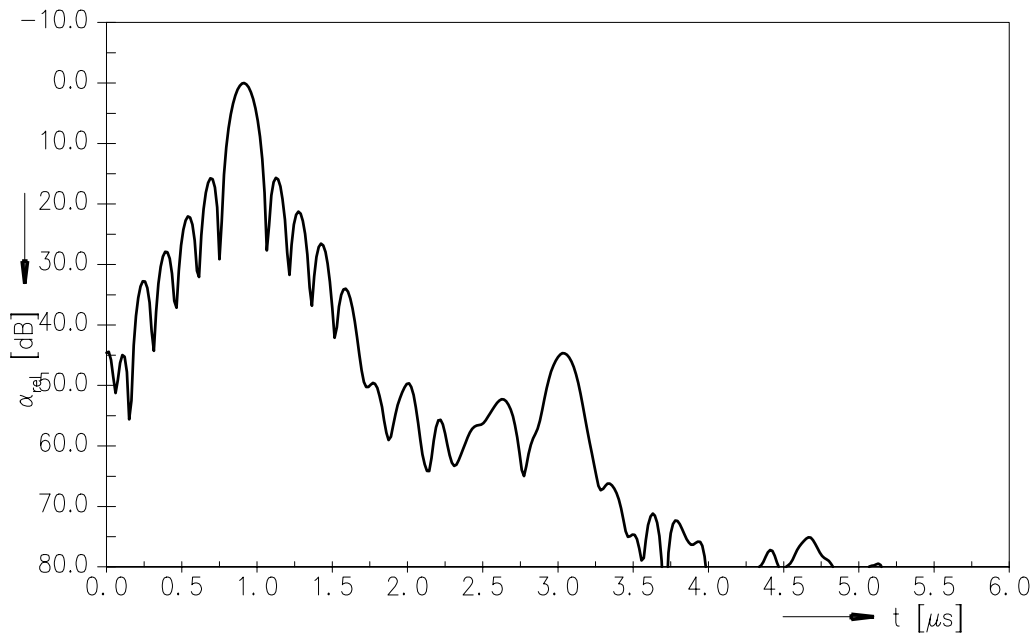
36.00 MHz

Data Sheet

Frequency response of channel 2



Time domain response of channel 2



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References

Type	X 7266 D
Ordering code	B39360-X7266-N201
Marking and package	C61157-A1-A21
Packaging	F61074-V8049-Z000
Date codes	L_1126
S-parameters	X7266N_NB.s4p
Soldering profile	S_6001
RoHS compatible	defined as compatible with the following documents: "DIRECTIVE 2002/95/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment. 2005/618/EC from April 18th, 2005, amending Directive 2002/95/EC of the European Parliament and of the Council for the purposes of establishing the maximum concentration values for certain hazardous substances in electrical and electronic equipment."

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