

3-Pole Filter for PCN RX

Preliminary Datasheet



Features

- SMD filter consisting of coupled resonators with stepped impedances
- (NdBa)TiO₃ ($\varepsilon_r = 88 / TC_f = 0 \pm 10 \text{ ppm/K}$) with a coating of copper (10µm) and tin (>5µm)
- Excellent reflow solderability, no migration effect due to copper/tin metallization

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Filter

B69813N1847K475



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Component drawing



View from below onto the solder terminals and view from beside

Recommended footprint



Top view



FPS3P21X.DOC

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Characteristics (items marked with * must still be correlated to customer print, top surface may have additional contact to ground)

		min.	typ.	max.	
Center frequency	f _C	-	1842.5	-	MHz
Insertion loss	$\alpha_{ L}$		3.5	3.7	dB
Passband	В	75			MHz
Amplitude ripple (peak - peak)	Δα		1.5	2.0	dB
Standing wave ratio	SWR		1.5	2.2	
Impedance	Ζ		50		Ω
Attenuation at DC to 1430 MHz at 1430 to 1705 MHz at 1705 to 1785 MHz at 1920 to 1980 MHz at 1980 to 2400 MHz at 3975 to 4200 MHz	α	38 32 13 12 20 10	45 45 14 13 28 12		dB dB dB dB dB dB

Maximum ratings

IEC climatic category (IEC 68-1)		- 40/+ 90/56	
Operating temperature	T _{op}	- 20 / + 80	°C

Typical Passband Characteristics



frequency [GHz]

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Processing information

• Wettability to IEC 68-2-58: \geq 75% (after aging)

Soldering requirements

Soldering type	reflow	
Maximum soldering temperature (measuring point on top surface of the component)	235 (max. 2 sec.) 225 (max. 10 sec.)	°C ℃

Recommended soldering conditions (infrared):



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Marking

K475+Delivery Week

Delivery mode

- Blister tape acc. to IEC 286-3, polyester, grey
- Pieces/tape: 3000
- All components with type specific marking and Date Code (Year- Week of Year: 'YWW')



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The information contained in this data sheet describes the type of component and shall not be considered as guaranteed characteristics. 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.

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