

6. YAV BOARDS AND MODULES

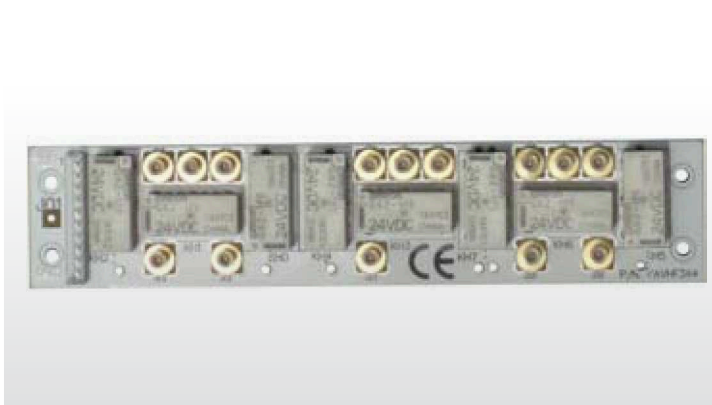
6.1.18 Multiplexer module up to 2,5 GHz YAVHF3X4

Features

- ✦ 2 trees 1 to 4 and 1 tree 1 to 3
- ✦ SMB connectors
- ✦ Configurable to 1 to 9
- ✦ CAN bus interface available

Applications

- ✦ Switching signals from DC to up to 2,5 GHz



Technical specs

INPUTS CHARACTERISTICS		ENVIRONMENT	
Maximum switching voltage	30VAC / DC	Operating temperature	0 ... 55°C
Maximum switching capacity	10W @900MHz	Storage temperature	-20 ... 70°C
Maximum carry current	0.50 A	Relative Humidity (non condensing)	5 ... 85%
Maximum RF power	10W @900MHz	PHISICAL CHARACTERISTICS	
Initial DC path resistance	< 100 mΩ	Relay type	Electromechan.
		High frequency connectors	SMB
		Control connector J01	JST B10B-EH-A
RF CHARACTERISTICS		DYNAMIC CHARACTERISTICS	
Characteristic impedance (Z0) P/N YAVHF3X5	50 Ω	Maximum scan rate	1,800 Op./hour
Characteristic impedance (Z0) P/N YAVHF3X4	75 Ω	Maximum relay operate time	< 10 ms
Insertion loss 1.0 GHz	< 0.50 dB	Expected relay mechanical life	1.000.000 Op.
Insertion loss 2.0 GHz	< 0.55 dB	Expected relay electrical life*	> 300.000 Op.
Insertion loss 2.5 GHz	< 0.57 dB	RELAY COIL CHARACTERISTICS	
Isolation 1.0 GHz	< -55 dB	Coil operation voltage	18 ... 27 V DC
Isolation 2.0 GHz	< -50 dB	Coil current at 24 VDC + 0%	8,3 mA
Isolation 2.5 GHz	< -45 dB		
Typical bank to bank crosstalk at 1.0 GHz	< -80 dB		
Typical bank to bank crosstalk at 2.0 GHz	< -65 dB		
Voltage standing rate ratio (VSWR) 1.0 GHz	< 1.35		
Voltage standing rate ratio (VSWR) 2.0 GHz	< 1.45		
Voltage standing rate ratio (VSWR) 2.5 GHz	< 1.50		

* Under rated load at 1.800 Operation/hour



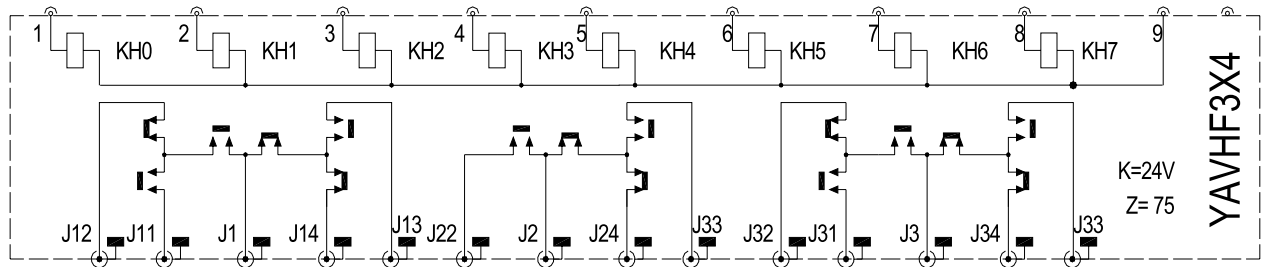
ORDERING INFORMATION

- 2.5 GHz Multiplexer SMB 75 Ω module
- 2.5 GHz Multiplexer SMB 50 Ω module

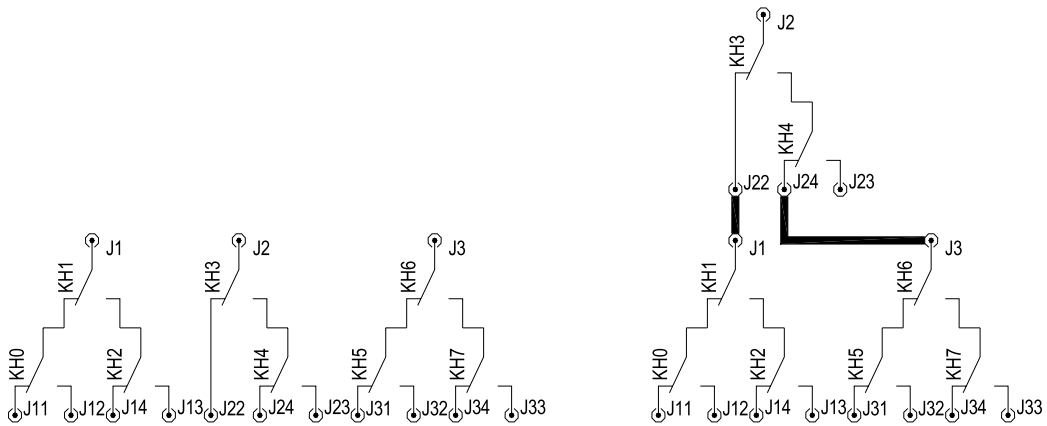
P/N

- YAVHF3X4
- YAVHF3X5

Schematic

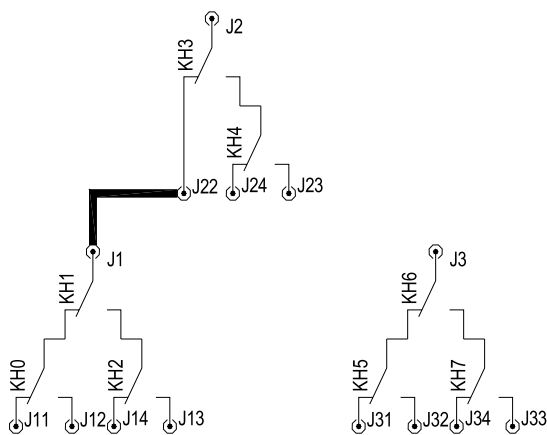


Application examples



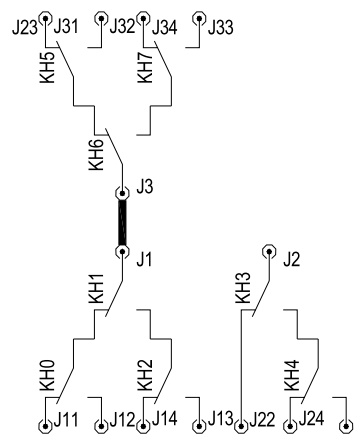
2x (1 to 4) 1x (1 to 3)

1x (1 to 9)



1x (1 to 6) 1x (1 to 4)

1x (1 to 7) 1x (1 to 3)



1x (4 to 4) 1x (1 to 3)

1x (3 to 4) 1x (1 to 4)