

Transmitter Combiners
UHF and Tetra Transmitter Combiners
TJ3x1y-R-z Series



TJ3214-R-3 Cavity-Ferrite Transmitter Combiner, 4 Channels, 7" Cavities, 406-440 MHz

- · Low loss broad band dual stage isolators
- · Allows for minimum Tx-Tx spacings of 200 KHz
- Expandable for more channels
- · Uses high 'Q' 1/4 wave bandpass cavity filters

Sinclair's 'TJ3x1y-R-z' series cavity ferrite transmitter combiners are available in 2 to 5 channel configurations for use in systems from 406-512 MHz. Each channel on these combiners includes a low-loss, broad band single or dual-stage isolator and High 'Q' 1/4 wave bandpass cavity filter suitable for close channel separations, typically 200 KHz.

The 'TJ3x1y-R-z' series combiners can be expanded to 20 channels. For expansion please contact the Sinclair Systems group.

The naming convention and options for the TJ3-R are as follows:

TJ3x1y-R-z

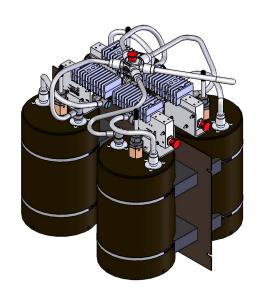
Isolator type

x=1 Single stage x=2 Dual stage

y= number of channels

Sub-band

z=3 406-440 MHz z=4 430-470 MHz z=5 459-512 MHz



Region	United States	Europe, Middle East and Africa	Caribbean and Latin America	Canada and rest of the world
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Dated: 22-08-19



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Temperature range

Frequency Range	MHz	406 to 440	
Number of channels		4	
Input Connectors		N-Female	
Output Connectors		N-Female	
Input VSWR (max)		1.25:1	
Output VSWR		2:1	
Insertion Loss (typ) Tx to Ant	dB	3.6	*1
Maximum Input Power (per channel)	W	125	
Frequency separation (min)	MHz	0.2	
laalatian Tu ta Tu	dB	60	
ISOIATION TX TO TX	45		
	dB	50	
Isolation Tx to Tx Isolation antenna to Tx Cavity electrical length	·	50 1/4	
Isolation antenna to Tx Cavity electrical length Mechanical Specifications Width	dB in (mm)	1/4 19 (483)	
Isolation antenna to Tx Cavity electrical length Mechanical Specifications Width Depth	in (mm)	1/4 19 (483) 14.8 (376)	
Isolation antenna to Tx Cavity electrical length Mechanical Specifications Width Depth Length/ Height	in (mm) in (mm) in (mm)	1/4 19 (483)	
Isolation antenna to Tx	in (mm)	1/4 19 (483) 14.8 (376) 15.3 (389)	

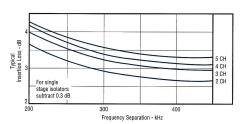
°F (°C)

Notes

*1 : @ 250 kHz Tx-Tx spacing

Ordering Information

Specify one Tx frequency per channel at time of order.



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Product Specification Sheet EPR 018653		TJ3214-R-3	Issue: 1	Dated: 22-08-19 Dated: 24-11-11

-22 to +140 (-30 to +60)