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Datasheet

HCMR150-4-DU

Hybrid 4 channel VHF TX/RX Combiner and Duplex Filter

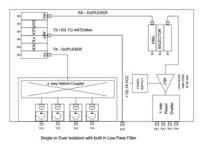
HCMR150-4-DU series is a VHF TX/RX hybrid combiner and duplexer with single or dual isolators used for combining 4 VHF transceivers into one antenna with close frequency

- Standard EIA 19" tray, 500 mm depth (3HU).
- Tuned to customer specified frequencies, need to be specified when ordering.
- Full bandwidth.

ELECTRICAL SPECIFICATIONS

Frequency 144 - 160 MHz 160 - 175 MHz VSWR ≤ 1.5:1 Impedance 50 Ohm Max. Input Power 50 Watts (Per channel) Insertion Loss (TX) Single isolator: < 8.6 dB Dual isolator: < 8.9 dB TX-TX spacing DU-5: ≤ 1.5 MHz DU-10: ≤ 2.0 MHz TX-RX spacing DU-5: 4 - 7 MHz DU-10: 8 -12 MHz Isolation RX-TX TX-TX spacing < 0.4 MHz :> 80 dB TX-TX spacing < 2.0 MHz :> 60 dB Isolation TX-RX RX-RX spacing < 0.4 MHz :> 80 dB RX-RX spacing < 2.0 MHz :> 60 dB	Туре	Hybrid 4 channel VHF TX/RX Combiner and Duplex Filter
Impedance50 OhmMax. Input Power50 Watts (Per channel)Insertion Loss (TX)Single isolator: < 8.6 dB Dual isolator: < 8.9 dB	Frequency	
Max. Input Power 50 Watts (Per channel) Insertion Loss (TX) Single isolator: < 8.6 dB Dual isolator: < 8.9 dB	VSWR	≤1.5:1
Insertion Loss (TX) Single isolator: < 8.6 dB Dual isolator: < 8.9 dB TX-TX spacing DU-5: ≤ 1.5 MHz DU-10: ≤ 2.0 MHz TX-RX spacing DU-5: 4 - 7 MHz DU-10: 8 -12 MHz Isolation RX-TX TX-TX spacing < 0.4 MHz :> 80 dB TX-TX spacing < 2.0 MHz :> 60 dB RX-RX spacing < 0.4 MHz :> 80 dB	Impedance	50 Ohm
Insertion Loss (TX) Dual isolator: < 8.9 dB TX-TX spacing DU-5: ≤ 1.5 MHz DU-10: ≤ 2.0 MHz TX-RX spacing DU-5: 4 - 7 MHz DU-10: 8 -12 MHz Isolation RX-TX TX-TX spacing < 0.4 MHz :> 80 dB TX-TX spacing < 2.0 MHz :> 60 dB RX-RX spacing < 0.4 MHz :> 80 dB	Max. Input Power	50 Watts (Per channel)
TX-TX spacing DU-10: ≤ 2.0 MHz TX-RX spacing DU-5: 4 - 7 MHz DU-10: 8 -12 MHz Isolation RX-TX TX-TX spacing <0.4 MHz :> 80 dB TX-TX spacing <2.0 MHz :> 60 dB RX-RX spacing <0.4 MHz :> 80 dB	Insertion Loss (TX)	
TX-RX spacing DU-10: 8 -12 MHz TX-TX spacing < 0.4 MHz :> 80 dB TX-TX spacing < 2.0 MHz :> 60 dB RX-RX spacing < 0.4 MHz :> 80 dB	TX-TX spacing	
TX-TX spacing <2.0 MHz :> 60 dB RX-RX spacing <0.4 MHz :> 80 dB	TX-RX spacing	
Isolation TX-RX	Isolation RX-TX	
	Isolation TX-RX	
Isolation TX - TX Single isolator: > 50 dB Dual isolator: > 70 dB	Isolation TX - TX	<u> </u>
Isolation RX-RX >20 dB	Isolation RX-RX	>20 dB
Bandwidth (RX) Approx. 3 MHz (In band)	Bandwidth (RX)	Approx. 3 MHz (In band)
Gain RX: 20±1.0 dB	Gain	RX: 20±1.0 dB
LNA Noise Figure < 2.0 dB	LNA Noise Figure	< 2.0 dB
Power Supply 100-240 V; 50/60 Hz (Max. 7W)	Power Supply	100-240 V; 50/60 Hz (Max. 7W)





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MECHANICAL SPECIFICATIONS

Color	Black Grey (RAL7021)
Dimension	482.6 x 133.5 x 500 mm (W x H x L)
Weight	Single isolator: 9.6 kg Dual isolator: 11.2 kg
Connector	Type N-female
Serial no.	On product label
Operating temperature	-20° to +60°C

ORDERING INFORMATION

55142-013	HCMR150-4S-L-5 144-160 MHZ 4CH x 50 W Single Isolator + DU-5
55144-023	HCMR150-4S-L-10 144-160 MHZ 4CH x 50 W Single Isolator + DU-10
55142-033	HCMR150-4S-H-5 160-175 MHZ 4CH x 50 W Single Isolator + DU-5
55144-043	HCMR150-4S-H-10 160-175 MHZ 4CH x 50 W Single Isolator + DU-10
55142-053	HCMR150-4D-L-5 144-160 MHZ 4CH x 50 W Dual Isolator + DU-5
55144-063	HCMR150-4D-L-10 144-160 MHZ 4CH x 50 W Dual Isolator + DU-10
55142-073	HCMR150-4D-H-5 160-175 MHZ 4CH x 50 W Dual Isolator + DU-5
55144-083	HCMR150-4D-H-10 160-175 MHZ 4CH x 50 W Dual Isolator + DU-10
Note	Power cable is not included