Datasheet

HCMR450-3-DU

Hybrid 3 channel UHF TX/RX Combiner and Duplexer Filter

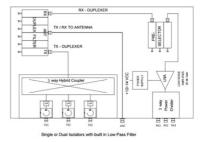
HCMR450-3-DU series is a UHF TX/RX hybrid combiner and duplexer with single or dual isolators used for combining 3 UHF transceivers into one antenna with close frequency

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



| Туре | UHF TX/RX Hybrid Combiner and duplexer - 3 Channels |
|---------------------|--|
| Frequency | 400 - 440 MHz 440 - 475 MHz |
| VSWR | ≤ 1.5:1 |
| Impedance | 50 Ohm |
| Max. Input Power | 50 Watts (Per channel) |
| Insertion Loss (TX) | Single Isolator: < 6.6 dB Dual Isolator: < 6.9 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 <0.5 MHz :> 80dB TX-TX spacing <2.0 MHz :> 60 dB |
| Isolation TX-RX | RX-RX spacing <0.5 MHz :> 80 dB RX-RX spacing <2.0 MHz :> 60 dB |
| Isolation TX - TX | Single Isolator: > 50 dB Dual Isolator: > 70 dB |
| Isolation RX-RX | >20 dB |
| Bandwidth (RX) | Approx. 5 MHz (in band) |
| Gain | RX: 20±1.0 dB |
| LNA Noise Figure | <2.0 dB |
| Power Supply | 100-240 V; 50/60 Hz (Max. 7W) |





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MECHANICAL SPECIFICATIONS

| Color | Black |
|-----------------------|--|
| Dimension | 482.6 x 133.5 x 500 mm (W x H x L) |
| Weight | Single isolator: 8.0 kg Dual isolator: 8.6 kg |
| Connector | Type N-female |
| Serial no. | On product label |
| Operating temperature | -20° to +60°C |

ORDERING INFORMATION

| 55432-013 | HCMR450-3S-L-5 400-440 MHz 3CH x 50 W Single Isolator + DU-5 |
|-----------|---|
| 55434-023 | HCMR450-3S-L-10 400-440 MHz 3CH x 50 W Single Isolator + DU-10 |
| 55432-033 | HCMR450-3S-H-5 440-475 MHz 3CH x 50 W Single Isolator + DU-5 |
| 55434-043 | HCMR450-3S-H-10 440-475 MHz 3CH x 50 W Single Isolator + DU-10 |
| 55432-053 | HCMR450-3D-L-5 400-440 MHz 3CH x 50 W Dual Isolator + DU-5 |
| 55434-063 | HCMR450-3D-L-10 400-440 MHz 3CH x 50 W Dual Isolator + DU-10 |
| 55432-073 | HCMR450-3D-H-5 440-475 MHz 3CH x 50 W Dual Isolator + DU-5 |
| 55434-083 | HCMR450-3D-H-10 440-475 MHz 3CH x 50 W Dual Isolator + DU-10 |
| Note | Power cable not included |