



## UHF Mobile Duplexer, 450-470MHz, N-Female

The 633-6A series Mobile Duplexer uses six capacitively tuned TEM resonators in a compact extruded 6063-T6 aluminum housing. The aluminum is irridite and the entire unit painted for additional protection. Specifications are given here for 5 MHz and 10 MHz separations. The 633-A Mobile Duplexer uses four resonators and cabling similar to 633-6A. The two additional cavities provide the added isolation required in some systems. Both duplexers use solid shield copper jacketed Teflon intercabling for low loss.



633-6A Series

### FEATURES / BENEFITS

- ➔ Low loss - Maximizes system performance.
- ➔ High isolation - Minimizes interference.
- ➔ Compact - Minimizes space requirements.

### Technical Features

#### GENERAL SPECIFICATIONS

|                   |  |        |
|-------------------|--|--------|
| Tech. Application |  | UHF    |
| Type              |  | Mobile |

#### ELECTRICAL SPECIFICATIONS

|                                      |       |               |
|--------------------------------------|-------|---------------|
| Frequency Band                       | MHz   | 380 - 512     |
| Frequency Spacing                    | MHz   | 5.0           |
| Tx to Rx Isolation                   | dB    | 75 or greater |
| Insertion Loss                       | dB    | 1.4           |
| Frequency Range                      | MHz   | 450 - 470     |
| Tx/Rx Bandwidth                      | MHz   | 0.025         |
| Tx Bandwidth                         | MHz   | 0.025         |
| Rx Bandwidth                         | MHz   | 0.025         |
| Continuous Power Input               | Watts | 50.0          |
| Insertion Loss, Tx - Ant.            | dB    | 1.4           |
| Insertion Loss, Rx - Ant.            | dB    | 1.4           |
| Tx Noise Suppression at Rx Frequency | dB    | 75.0          |
| Rx Isolation at Tx Frequency         | dB    | 75.0          |
| VSWR Max. (50 ohms)                  |       | 1.3:1         |

#### MECHANICAL SPECIFICATIONS

|                                |         |              |
|--------------------------------|---------|--------------|
| Connector Type                 |         | N-Female     |
| Rack Mount                     |         | No           |
| Connectors - Ant. Port         |         | N-Female     |
| Connectors - Tx Port           |         | N-Female     |
| Connectors - Rx Port           |         | N-Female     |
| Height                         | mm (in) | 31.8 (1-1/4) |
| Width                          | mm (in) | 157 (6-3/16) |
| Depth                          | mm (in) | 228 (9)      |
| Mounts in 19" (483mm) EIA Rack |         | No           |
| Weight                         | kg (lb) | 1.7 (3.5)    |

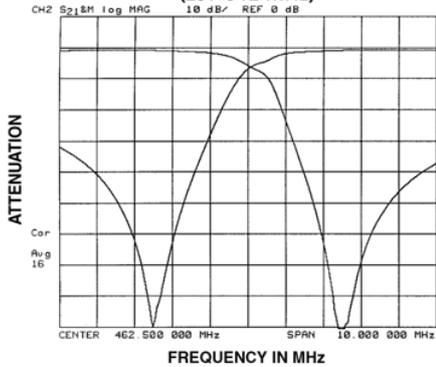
#### TEMPERATURE SPECIFICATIONS

|                   |         |                         |
|-------------------|---------|-------------------------|
| Temperature Range | °C (°F) | -30 to 60 (-22 to 140 ) |
|-------------------|---------|-------------------------|



# UHF Mobile Duplexer, 450-470MHz, N-Female

633-6A-2N RESPONSE CURVES (Typical)  
5 MHz SPACING  
(297-512 MHz)



Response Curve

**External Document Links**

**Notes**