## IMARK PRODUCT DESCRIPTION



## CZX-3500 TOHTSU COAXIAL RELAY

SPDT 12 Volt High Specification Coaxial Relay with three "N" Type Female Connectors Imark Stock # 851461

## Features:

- Compact Size
- Operates up to 6.0 GHz
- Low Insertion Loss
- Low VSWR
- Excellent Isolation
- High Power Capability
- 12 Volt Operation
- 24 Volt or 48 Volt versions also available

## **DESCRIPTION:**

The Tohtsu CZX-3500 is a high specification Coaxial Relay specifically designed for switching RF feed paths in two-way radio applications. They are designed for internal fitment within radio equipment but can be remotely mounted nearer the antenna if required. It is fitted with three "N" Type Female Connectors. Switching is achieved by applying 12 Volts DC to the Coil. The Tohtsu CZX-3500 Coaxial Relays feature low loss, good VSWR, excellent isolation, and high RF power handling characteristics up to 6 GHz.

| SPECIFICATIONS:             |  |
|-----------------------------|--|
| COIL                        |  |
| Actuation Voltage           | 10Vdc - 14Vdc (12 Volts DC Nominal)                              |
| Current Requirement         | 250mA @ 12 Vdc 20°C  |
| Coil Resistance             | 48Ω ±10% 20°C  |
| Switching Time              | 20mS (Pull In) Max, 18mS (Drop Out) Max                          |
| SWITCHING CIRCUIT           |  |
| Circuit Type                | SPDT   |
| Switching Circuit Impedance | $50\Omega$   |
| Voltage Standing Wave Ratio | Less than 1.3:1 @ 6.0GHz   |
| Isolation                   | >65dB @ 50 MHz   |
|                             | >50dB @ 6.0 GHz  |
| Insertion Loss              | <0.1dB @ 50 MHz  |
|                             | <0.4dB @ 6.0 GHz   |
| Maximum Input Power         | 2300 Watts (PEP) @ 50 MHz  |
|                             | 100 Watts (CW) @ 6.0GHz  |
| Crosstalk                   | 76dB @ 30 MHz to 49 dB @ 1.0 GHz                                 |
| Connector Type              | 3 x "N" Type Female Connectors                                   |
| MECHANICAL & PHYSICAL       |  |
| Life Expectancy             | 1,000,000 Operations Minimum                                     |
| Operational Temperature     | -50°C to +70°C   |
| Mounting Requirements       | 4 pieces M3 Screws (Not Supplied)                                |
| Overall Unit Dimensions     | 68(W) x 43(D) x 61(H) mm   |
| Shipping Dimensions         | 78(W) x 100(D) x 60(H) mm  |
| Unit Weight                 | 300 grams  |
| Shipping Weight             | 335 grams  |
| Inclusions                  | Relay Unit, Instruction Sheet                                    |
| Approvals                   |  |
| Imark Stock #               | 851461   |
| Options                     | 24Vdc version (851462), 48Vdc version available by special order |