

Overview

The JT-DL302 Series fiber optic delay line delivers a high degree of performance when used together with a fiber optic transmitter/receiver pair to delay RF signals. Typical applications include radar testing, signal processing, phased array antennas, and phase noise testing.

Specifications

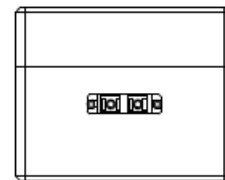
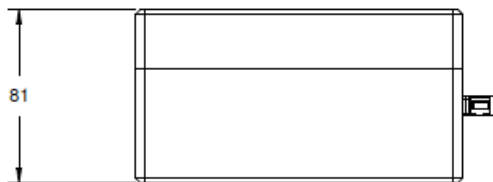
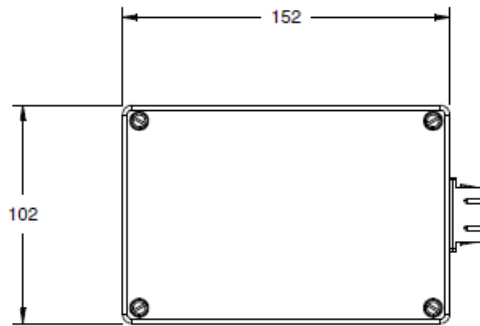
| Parameter | Specification | Units |
|----------------------------------|--|-------|
| Fiber | Singlemode SMF-28 (9/125) | μm |
| Optical Connector | SC/APC, FC/APC | - |
| Time Delay | 0.01 – 280 | μsec |
| Delay Time Accuracy | ± 1.0 | % |
| RF Insertion Loss | 2 + (Delay Time _(μsec) / 6.12 _(dB/μsec)) | dB |
| Optical Insertion Loss | 2 + (Delay Time _(μsec) / 12.24 _(dB/μsec)) | dB |
| Relative Delay vs. Temperature | 6.5 | ppm/C |
| Storage Temperature (continuous) | -40 to +85 | C |

Connector Options

| Description | Description |
|-----------------|-------------|
| SC/APC Bulkhead | -SCB |
| FC/APC Bulkhead | -FCB |

Outline Drawing

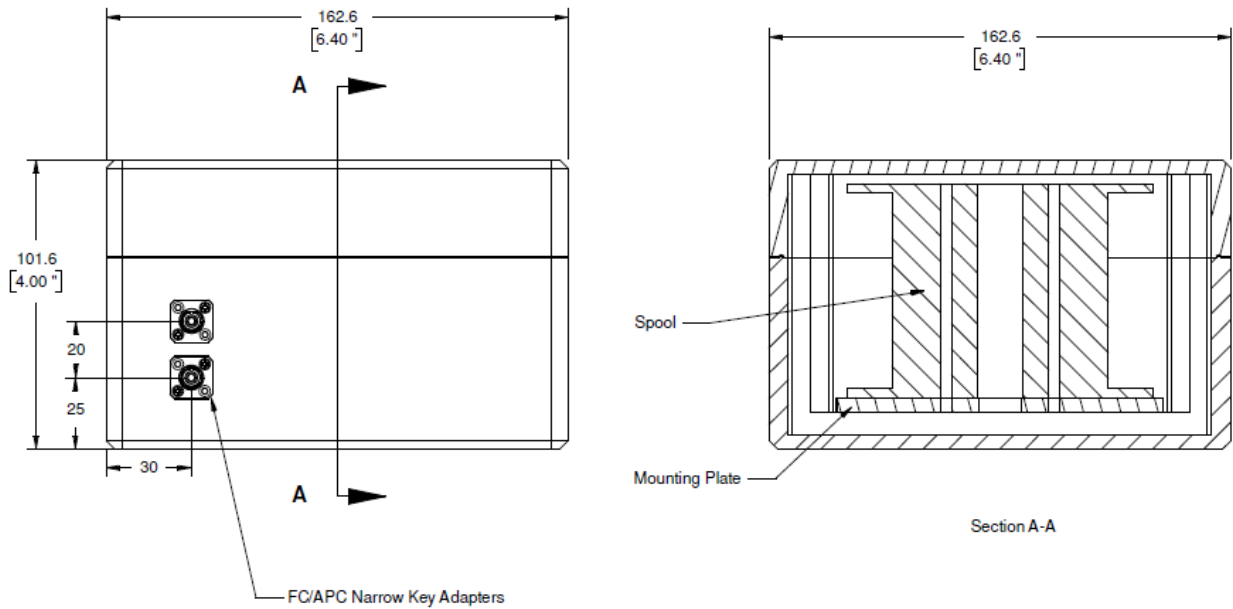
The outline drawing below accommodates delays up to 15 μ sec. Duplex bulkhead SC/APC optical connectors are shown in the figure.



Dimensions in inches (6.0" x 4.0" x 3.2") and mm (152.0 x 102.0 x 81)
SC/APC duplex bulkhead optical connector
Powder-coated aluminum finish



The outline drawing below accommodates delays greater than 15 μ sec. Duplex bulkhead FC/APC optical connectors are shown in the figure.



Dimensions in inches (6.4" x 6.4" x 4.0") and mm (162.6 x 162.6 x 101.6)
 FC/APC bulkhead optical connectors
 Powder-coated aluminum finish



Ordering Information

JT-DL302-xxxx-SCB

where xxxx = delay time in 0.1 msec (example: xxxx = 0075 = 7.5 μ sec)