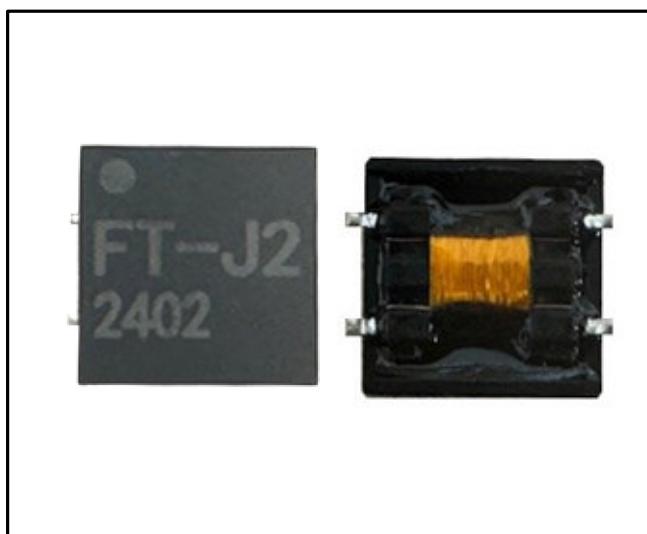
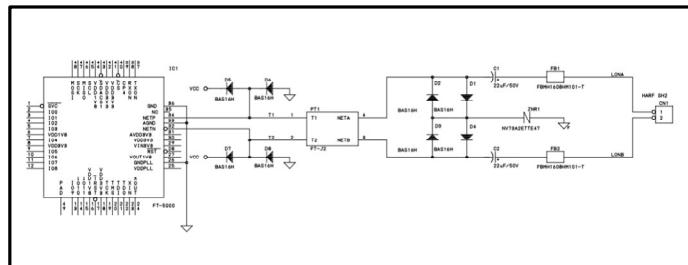


FT-J2 Free Topology Transceiver



Connection circuit diagram



The window clamp circuit (D5, D6, D7, D8) is connected to terminals T1 and T2.

General Specifications

Data Communications Type

Differential Manchester coding

Network Polarity

Polarity insensitive

Isolation Between Network and

0-60Hz, 60 seconds 1000Vrms

0-60Hz, continuous 277Vrms

EMI

Designed to comply with FCC Part 15 Level B and EN55022 Level B

ESD

Designed to comply with EN 61000-4-2, Level 4

Radiated Electromagnetic Susceptibility

Designed to comply with EN 61000-4-3, Level 3

Fast Transient/Burst Immunity

Designed to comply with EN 61000-4-4, Level 4

Surge Immunity

Designed to comply with EN 61000-4-5, Level 3

Conducted RF Immunity

Designed to comply with EN 61000-4-6, Level 3

Transmission Speed

78 kilobits per second

Number of Transceivers Per Segment

Up to 64

Network Wiring

24 to 16AWG twisted pair

Network Length in Free Topology

1000m (3,280 feet) maximum total wire with one repeater

500m (1,640 feet) maximum total wire with no repeaters

500m (1,640 feet) maximum device-to-device distance

Network Length in Doubly Terminated Bus Topology

5400m (17,710 feet) with one repeater

2700m (8,850 feet) with no repeaters

Network Termination

One terminator free topology; two terminators bus topology

Operating Temperature

-40 to 85°C

Operating Humidity

25-90% RH @50°C, non-condensing

Peak Reflow Soldering Temperature

260°C

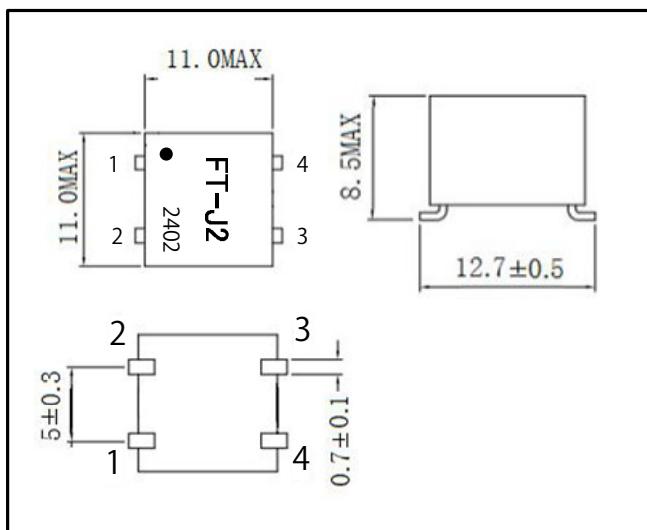
Description

The FT-J2 Free Topology Transceiver is a transceiver compliant with ANSI/CEA-709.3+R2015.

By combining the ANSI/CEA-709.1-B (EN14908.1) protocol stack with the FT-J2 transceiver, it is possible to connect to an FT-10 free topology network using this pulse transformer. The FT-J2 is a pulse transformer that can be connected to FT-709MW, EIA709MW, and FT-5000.

FT-J2 Communication Transformer

SMT Package Diagram



FT-J2 Transformer Pin Descriptions

Pin Number	Pin Name	Pin Function
1	T1	Internally connects to pin
2	T2	Internally connects to pin
3	NETB	Network Port, polarity Insensitive
4	NETA	Network Port, polarity Insensitive