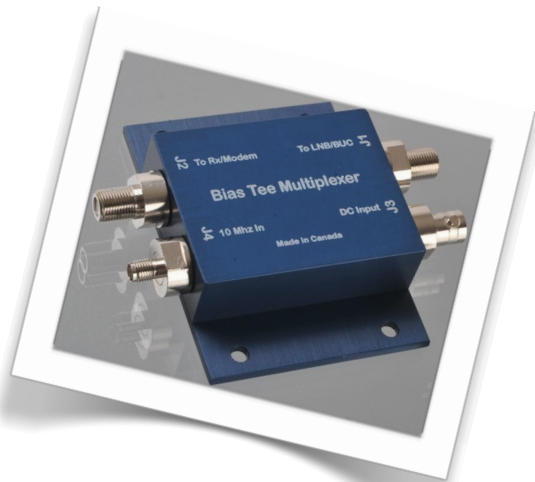


Orbital Research Ltd 'Tees'



The Orbital "Tees" Family is based on the original Orbital Mux/Tee that injects DC and Multiplexes a 10 MHz signal onto an L-Band signal. Subsequent "Tees" were derived from customer requests.

Each Tee type has superb L-Band filtering and extracts those same signals from the L-Band when the Tee is placed in reverse.

Electrical Specs in common with all Tees

L Band

Bandpass: 900 to 2100 MHz
 From 2.1 to 3.4 GHz with 0.7 dB insertion loss (max)
 From 3.4 to 4.2 GHz with 1.0 dB insertion loss (max)
 Thru Loss: 0.5 dB maximum
 Ripple: ±0.3 dB maximum
 Input/Output VSWR: 1.3 : 1 maximum

10 MHz

Passband: 1-100 MHz (3 dB down)
 Thru Loss: 0.3 dB, 10 MHz to LNB port (max)

DC

Filtering: Hash filter, low pass filter
 Resistance: 0.132 ohms (average)

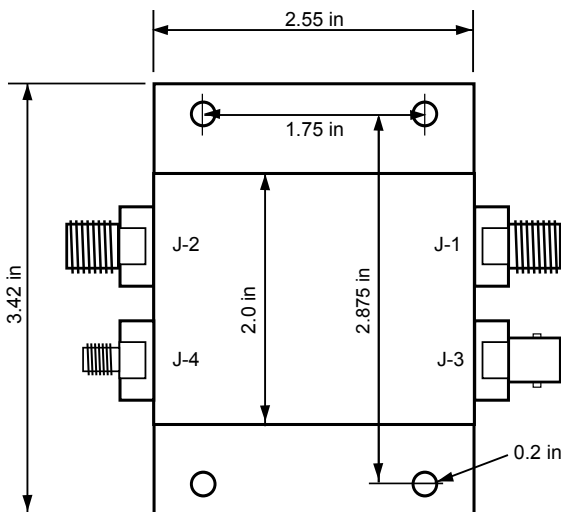
Part Numbering System

MT	25	N	N	B	S
Tee Type	Power	J1	J2	J3	J4
MT	25 (2.5A)	F	F	F	F
DPT	40 (4.0A)	N	N	N	N
TT	60 (6.0A)	S	S	S	S
TMT		B	B	B	B
DET					
RET					

(F = F 75Ω. N = N 50Ω. S = SMA 50Ω. B = BNC 50Ω)

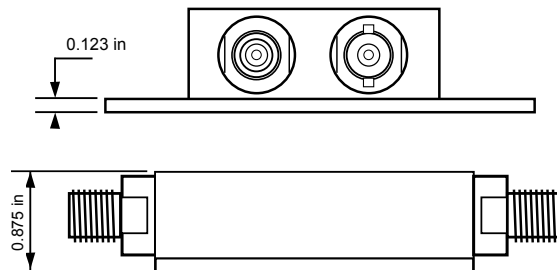
Mechanical Diagrams

All Orbital Tees have the same mechanical characteristics.



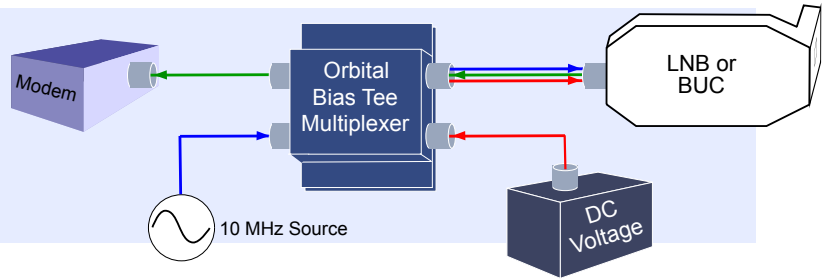
Mechanical Specs

Measurements: Tolerance ± .005 in.
 Weight: 5 oz, 142 grams
 Paint: Blue Anodized finish
 Mil Spec Fed Std 595
 Mounting holes: 0.200" (5 mm)
 Accepts standard rackmounting screws: 10/32 or 10/34
 MTBF: >125,000 hours
 Compliance: RoHs & REACH



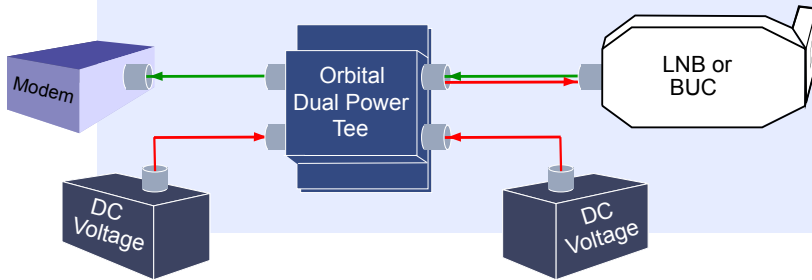
Mux/Tee: MT25, MT40, MT60

- Multiplexes the 10 MHz and,
 - Biases the DC onto the L-Band line
- Example part #: MT25-NNBS



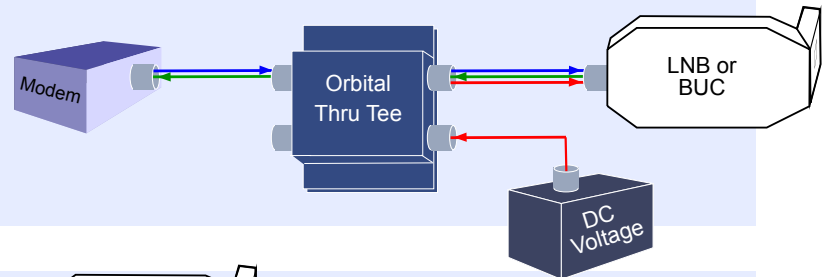
Redundant Power Tee: RPT25

- Bias Tee with dual DC inputs
 - DC inputs in redundant configuration
- Example part #: RPT25-FFBB



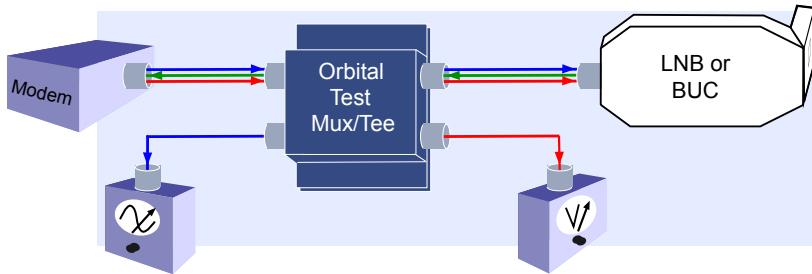
Thru Tee: TT25, MT40

- Lets 10 MHz thru from modem
 - Biases DC onto L-Band line
- Example part #: TT25-NNBP



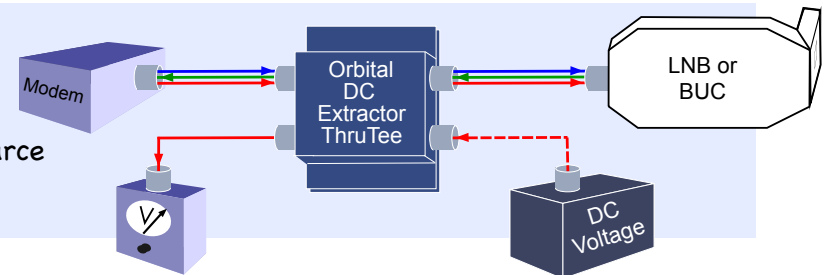
Test Mux/Tee: TMT25, TMT40

- Lets 10 MHz & DC thru from modem
 - Taps 10 MHz & DC from L-Band
- Example part #: TMT25-FFBS



DC Extractor Tee: DET25, DET40

- Lets 10 MHz & DC thru from modem
 - Taps DC from L-Band
 - DC can come from modem or other source
- Example part #: DET25-FFBB



Ref Extractor Tee: RET25, RET40

- Lets 10 MHz thru from modem
 - Biases DC onto L-Band line
 - Taps 10 MHz from L-Band
- Example part #: RET25-FFBS

