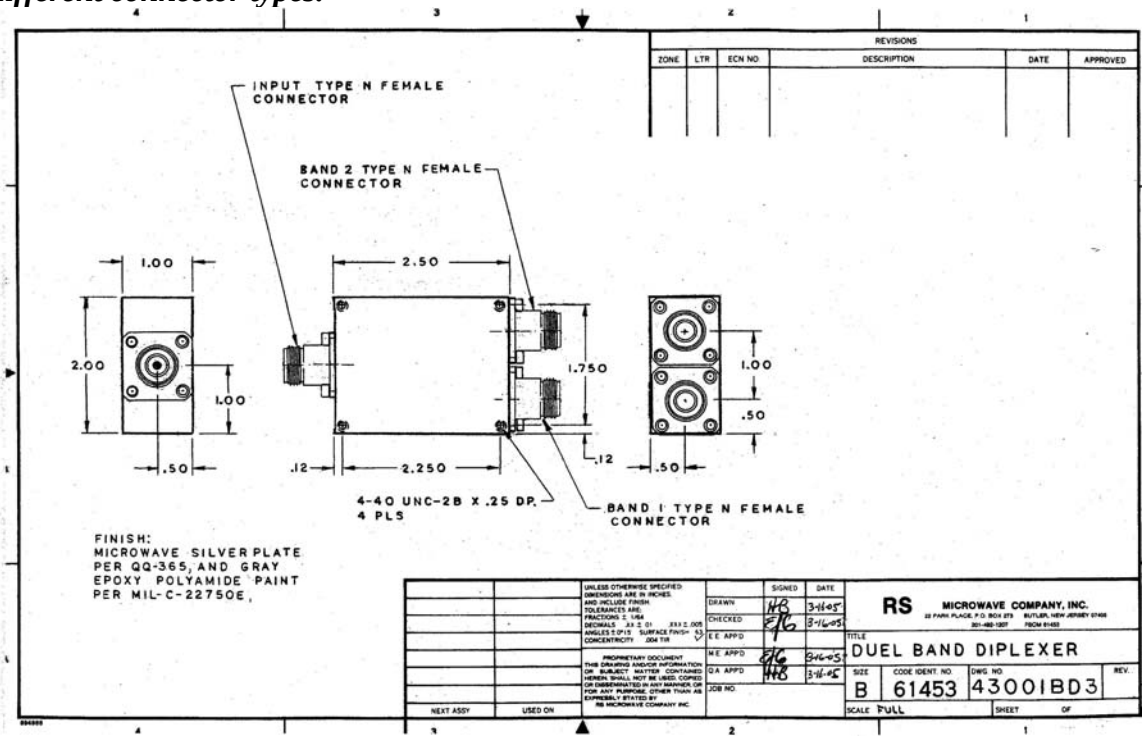
43001BD3

Dual band diplexer, with D.C. path to high band port. Intended to pass GPS L1 and L2 and D.C. in the high band, and 30 to 150 MHz in the low band.

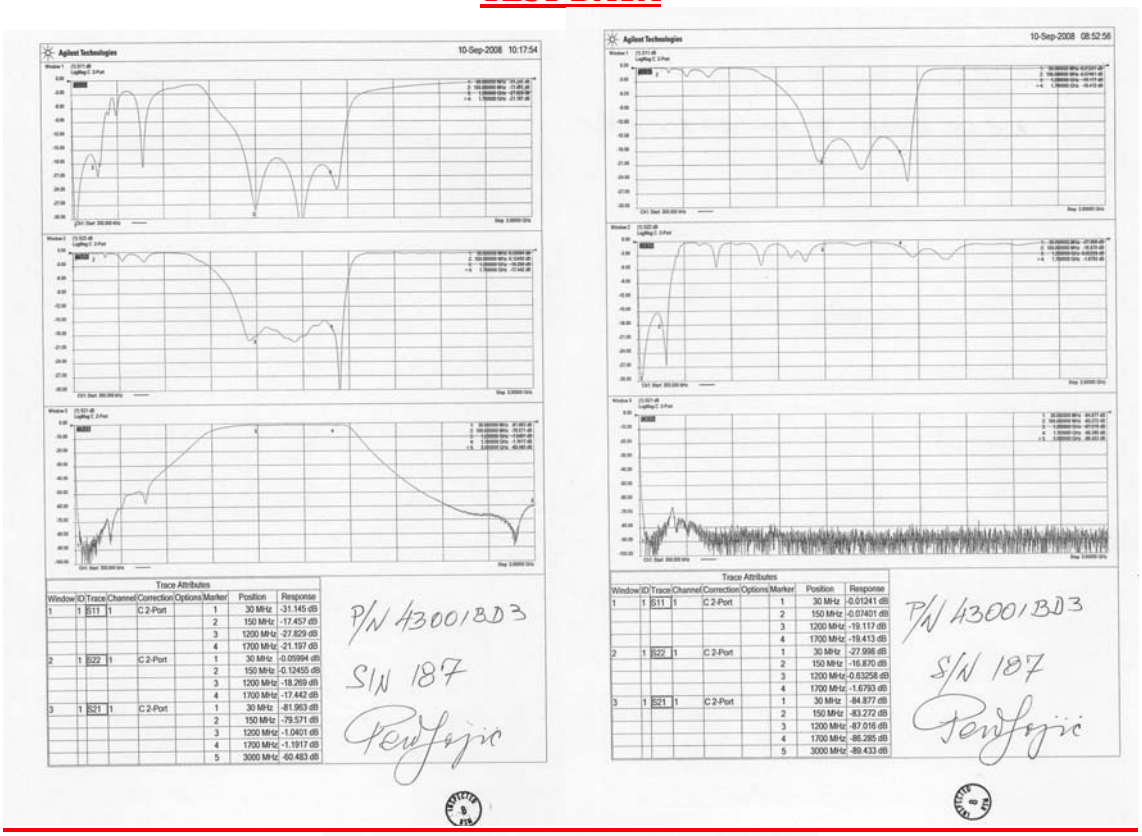
Specifications

Band 1: 30 - 150 MHz
Band 2: 1200 - 1700 MHz
Band 1 to band 2 rejection: 40 dB
Band 2 to band 1 rejection: 40 dB
Isolation from output 1 to output 2: 40 dB
Maximum in band insertion loss for bands 1 and 2: 1.5 dB
Maximum return loss at inputs for band 1 and 2: 12 dB
DC impedance to ground greater than 1 megohm
DC block in band 1 output
DC conduction between input and band 2 output:
500 mill amperes at 15 volts DC maximum
DC path resistance one ohm maximum
Environment: shipboard
Temperature, -40C to +60C
Input power: 10 Watts on Band 1 (30 - 150 MHz)
2 Watts on Band 2 (1200 - 1700 MHz)
Duty cycle: CW
Quantity: minimum 2
Crossover frequency: 1.0 GHz (this is a nominal number only)
No RF energy outside of band 1 and band 2.(up to at least 3 GHz)

***Note:** Electrical specifications are the same for part numbers 43001BD and 43001BD2. These are units with different connector types.*



TEST DATA


Agilent Technologies
10-Sep-2008 10:17:54
Trace Attributes
Window ID Trace Channel Correction Options Marker Position Response
1 1 S11 1 C 2-Port 1 30 MHz -31.145 dB
2 150 MHz -17.457 dB
3 1200 MHz -27.829 dB
4 1700 MHz -21.197 dB
2 1 S22 1 C 2-Port 1 30 MHz -0.05994 dB
2 150 MHz -0.12455 dB
3 1200 MHz -18.269 dB
4 1700 MHz -17.442 dB
3 1 S21 1 C 2-Port 1 30 MHz -81.963 dB
2 150 MHz -79.571 dB
3 1200 MHz -1.0401 dB
4 1700 MHz -1.1917 dB
5 3000 MHz -60.483 dB
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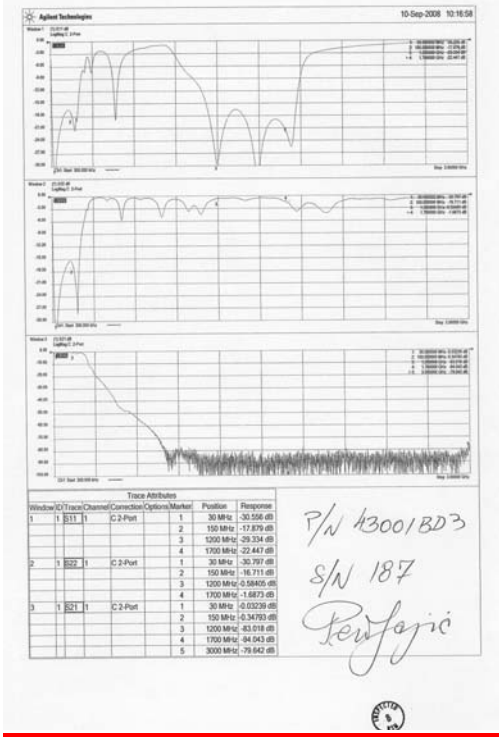
Agilent Technologies
10-Sep-2008 08:52:56
Trace Attributes
Window ID Trace Channel Correction Options Marker Position Response
1 1 S11 1 C 2-Port 1 30 MHz -0.01241 dB
2 150 MHz -0.07401 dB
3 1200 MHz -19.117 dB
4 1700 MHz -19.413 dB
2 1 S22 1 C 2-Port 1 30 MHz -27.998 dB
2 150 MHz -16.870 dB
3 1200 MHz -0.63258 dB
4 1700 MHz -1.6793 dB
3 1 S21 1 C 2-Port 1 30 MHz -84.877 dB
2 150 MHz -83.272 dB
3 1200 MHz -87.016 dB
4 1700 MHz -86.285 dB
5 3000 MHz -89.433 dB
P/N 43001BD3
S/N 187


Agilent Technologies
10-Sep-2008 10:16:58
Trace Attributes
Window ID Trace Channel Correction Options Marker Position Response
1 1 S11 1 C 2-Port 1 30 MHz -30.556 dB
2 150 MHz -17.879 dB
3 1200 MHz -29.334 dB
4 1700 MHz -22.447 dB
2 1 S22 1 C 2-Port 1 30 MHz -30.797 dB
2 150 MHz -16.711 dB
3 1200 MHz -0.58405 dB
4 1700 MHz -1.6873 dB
3 1 S21 1 C 2-Port 1 30 MHz -0.03239 dB
2 150 MHz -0.34793 dB
3 1200 MHz -83.018 dB
4 1700 MHz -94.043 dB
5 3000 MHz -79.642 dB
P/N 43001BD3
S/N 187