

MOBILE BAND REJECT DUPLEXERS • COAXIAL TYPE DCL Series • 340 - 960 MHz



Fiplex DCL Series are coaxial mobile duplexers intended to be used in systems up to 50 watts in the 340 - 960 MHz range.

Typical applications include:

Digital and analog wireless radio, low power repeaters, mobile full duplex radios, etc.

Resonant cavities are interconnected in a band reject configuration, which allows typical Tx to Rx frequency separation of 5.0 MHz in the range of 340 - 520MHz, and 9.0 MHz in the range of 800 - 960 Mhz

To improve Tx to Rx isolation, semi-rigid coaxial cables are used.

In order to have a long life performance, metal surfaces are properly finished.

These duplexers use six TEM silver plated copper resonators, housed in 6063-T6 alodine finished aluminum cavities.

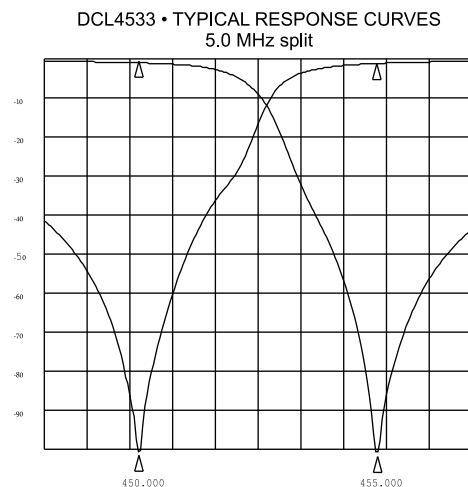
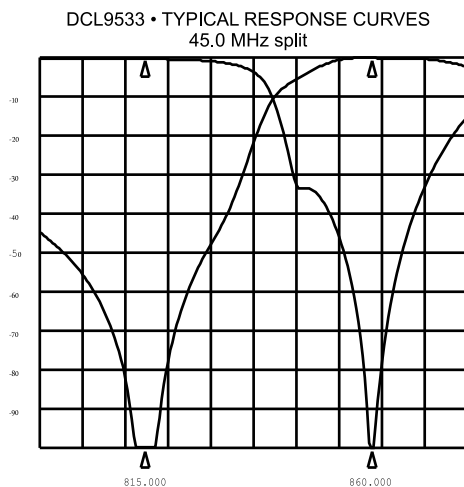
The entire unit is painted for additional protection.

Standard connectors are BNC female. N female and TNC female available upon request.

For other than specified, please contact the factory or sales offices.



DCL4533



ELECTRICAL SPECIFICATIONS	DCL3533A	DCL3533B	DCL4533A	DCL4533B
Frequency Range - MHz	340 – 400	340 – 400	400 – 520	400 – 520
Tx–Rx Separation – MHz	5.0	10.0	5.0	10.0
Tx-Rx Band Width – MHz	0.025	0.050	0.050	0.050
Continuous Power Input, Max- W.	50	50	50	50
Insertion Loss Tx - Antenna - dB	1.5 dB max	1.5 dB max	1.5 dB max	1.5 dB max
Insertion Loss Antenna - Rx - dB	1.5 dB max	1.5 dB max	1.5 dB max	1.5 dB max
Tx Noise Rejection at Rx Freq. - dB	75dB min, 90dB typ	75dB min, 90dB typ	75dB min, 90dB typ	75dB min, 90dB typ
Rx-Tx Isolation at Tx Freq. - dB	75dB min, 90dB typ	75dB min, 90dB typ	75dB min, 90dB typ	75dB min, 90dB typ
RL - dB	15dB min, 22dB typ	15dB min, 22dB typ	15dB min, 22dB typ	15dB min, 22dB typ
Connectors, Standard Type	BNC(f)	BNC(f)	BNC(f)	BNC(f)
Connectors, Optional Type	N(f)	N(f)	N(f)	N(f)
Temperature range - °C	- 30 to + 60	- 30 to + 60	- 30 to + 60	- 30 to + 60

MECHANICAL SPECIFICATIONS	DCL3533A	DCL3533B	DCL4533A	DCL4533B
Height – in (mm)	1.25 (31.0)	1.25 (31.0)	1.25 (31.0)	1.25 (31.0)
Width – in (mm)	6.1 (155.0)	6.1 (155.0)	6.1 (155.0)	6.1 (155.0)
Depth – in (mm)	8.7 (221.0)	8.7 (221.0)	8.15 (201.0)	8.15 (201.0)
Weight – lbs (kg)	2.2 (1.0)	2.2 (1.0)	2.2 (1.0)	2.2 (1.0)

ELECTRICAL SPECIFICATIONS	DCL7533	DCL9533A	DCL9533B1	DCL9533B2
Frequency Range - MHz	764 – 806	800 – 960	800 – 960	880 – 960
Tx–Rx Separation – MHz	30.0	9.0 to 30.0	30.0 to 80.0	30.0 to 80.0
Tx-Rx Band Width – MHz	0.025	0.050	0.050	0.050
Continuous Power Input, Max- W.	50	50	50	50
Insertion Loss Tx - Antenna - dB	1.5 dB max	1.5 dB max	1.5 dB max	1.5 dB max
Insertion Loss Antenna - Rx - dB	1.5 dB max	1.5 dB max	1.5 dB max	1.5 dB max
Tx Noise Rejection at Rx Freq. - dB	75dB min, 90dB typ	75dB min, 90dB typ	75dB min, 90dB typ	75dB min, 90dB typ
Rx-Tx Isolation at Tx Freq. - dB	75dB min, 90dB typ	75dB min, 90dB typ	75dB min, 90dB typ	75dB min, 90dB typ
RL - dB	15dB min, 22dB typ	15dB min, 22dB typ	15dB min, 22dB typ	15dB min, 22dB typ
Connectors, Standard Type	BNC(f)	BNC(f)	BNC(f)	BNC(f)
Connectors, Optional Type	N(f)	N(f)	N(f)	N(f)
Temperature range - °C	- 30 to + 60	- 30 to + 60	- 30 to + 60	- 30 to + 60

MECHANICAL SPECIFICATIONS	DCL7533	DCL9533A	DCL9533B1	DCL9533B2
Height – in (mm)	1.25 (31.0)	1.25 (31.0)	1.25 (31.0)	1.25 (31.0)
Width – in (mm)	6.1 (155.0)	6.1 (155.0)	6.1 (155.0)	6.1 (155.0)
Depth – in (mm)	5.75 (146.0)	5.1 (129.6)	5.1 (129.6)	5.1 (129.6)
Weight – lbs (kg)	1.6 (0.75)	1.6 (0.75)	1.6 (0.75)	1.6 (0.75)