

MOBILE BAND REJECT DUPLEXERS • HELICAL TYPE DHL Series • 136 - 520 MHz



Fiplex DHL Series are helical mobile duplexers intended to be used in systems up to 50 watts in the 136 - 520 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 136 - 520MHz.

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 helical resonators, housed in 6063-T6 aluminum cavities with alodine finishing.

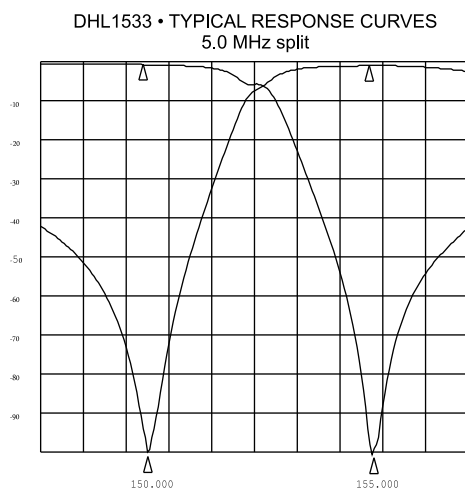
The entire unit is painted for additional protection.

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

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



DHL1533



ELECTRICAL SPECIFICATIONS	DHL1533A	DHL1533B	DHL2633A	DHL2633B
Frequency Range - MHz	136 – 174	136 – 174	220 – 280	220 – 280
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	DHL1533A	DHL1533B	DHL2633A	DHL2633B
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)	7.6 (195.0)	7.6 (195.0)	5.5 (140.0)	5.5 (140.0)
Weight – lbs (kg)	2.2 (1.0)	2.2 (1.0)	1.6 (0.75)	1.6 (0.75)

ELECTRICAL SPECIFICATIONS	DHL3533B	DHL4533B
Frequency Range - MHz	340 – 400	400 – 520
Tx-Rx Separation – MHz	10.0	10.0
Tx-Rx Band Width – MHz	0.025	0.050
Continuous Power Input, Max- W.	40	40
Insertion Loss Tx - Antenna - dB	1.5 dB max	1.5 dB max
Insertion Loss Antenna - Rx - dB	1.5 dB max	1.5 dB max
Tx Noise Rejection at Rx Freq. - dB	70dB min, 85dB typ	70dB min, 85dB typ
Rx-Tx Isolation at Tx Freq. - dB	70dB min, 85dB typ	70dB min, 85dB typ
RL - dB	15dB min, 22dB typ	15dB min, 22dB typ
Connectors, Standard Type	BNC(f)	BNC(f)
Connectors, Optional Type	N(f)	N(f)
Temperature range - °C	- 30 to + 60	- 30 to + 60

MECHANICAL SPECIFICATIONS	DHL3533B	DHL4533B
Height – in (mm)	1.25 (31.0)	1.25 (31.0)
Width – in (mm)	6.1 (155.0)	6.1 (155.0)
Depth – in (mm)	4.5 (115.0)	4.5 (115.0)
Weight – lbs (kg)	1.6 (0.75)	1.6 (0.75)