

Diplexer Plug-In

DPLC-EDU2346_1

Important Note

This model has been designed, built and tested in our engineering department. Performance data represents model capability. At present it is a non-catalog model. On request, we can supply a final specification sheet, part number and price/delivery information.



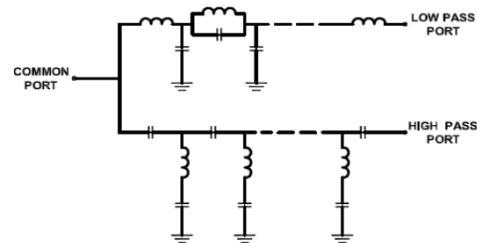
Please click "Back", and then click "Contact Us" for Applications support.

CASE STYLE : QB2223

| ELECTRICAL SPECIFICATIONS 75Ω @ +25°C | | | | | | | |
|---------------------------------------|---------------------|-----------------|-----------|--------|------|-------|----|
| Parameter | Port | Frequency (MHz) | Min. | Typ. | Max. | Units | |
| Passband | Insertion Loss | Lowpass | DC-204 | - | 1 | 1.5 | dB |
| | | Highpass | 258-1220 | - | 1 | 1.5 | dB |
| | Return Loss | Lowpass | DC-204 | 20 | 24 | - | dB |
| | | | 258-1000 | 20 | 24 | - | dB |
| | | Highpass | 1000-1220 | 18 | 20 | - | dB |
| | | | Common | DC-204 | 20 | 24 | - |
| | | 258-1000 | | 20 | 24 | - | dB |
| | | 1000-1220 | | 18 | 20 | - | dB |
| | Stop band isolation | Lowpass | 258-1220 | 42 | 45 | - | dB |
| Highpass | | DC-204 | 45 | 50 | - | dB | |
| Cross over | | 204-258 | 35 | 40 | - | dB | |

| MAXIMUM RATINGS | |
|-----------------------|----------------|
| Operating Temperature | -40°C to 85°C |
| Storage Temperature | -55°C to 100°C |
| RF Power Input | 1 W |

Functional Schematic



| PIN CONNECTIONS | |
|-----------------|-------------|
| Highpass port | 7 |
| Lowpass port | 1 |
| Common port | 4 |
| Ground | 2,3,5,6,8,9 |

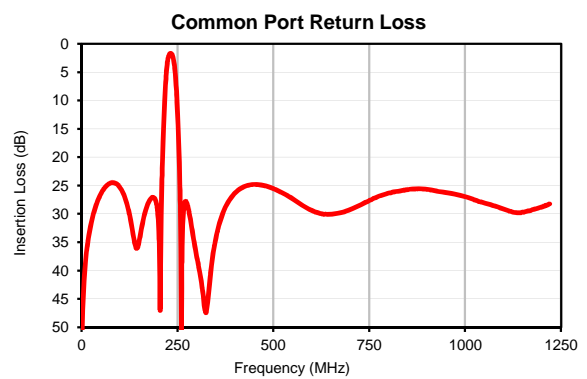
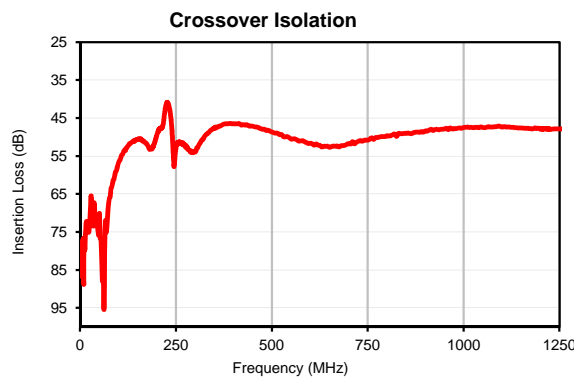
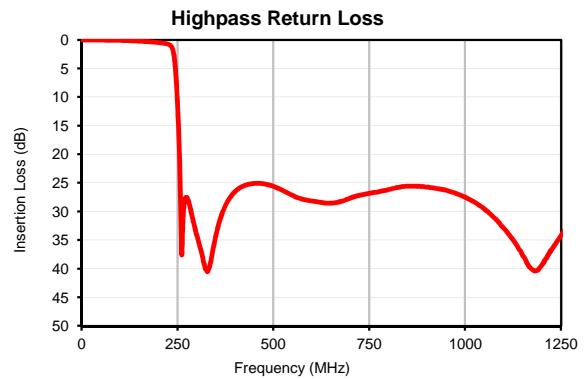
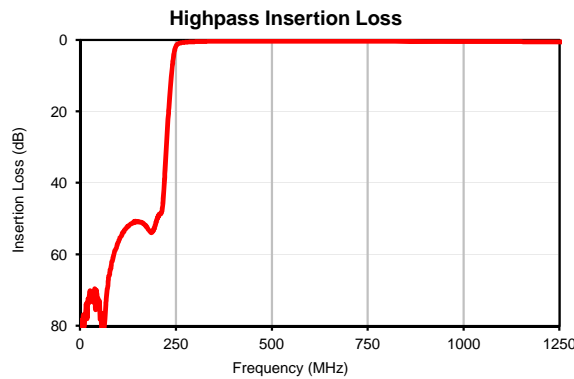
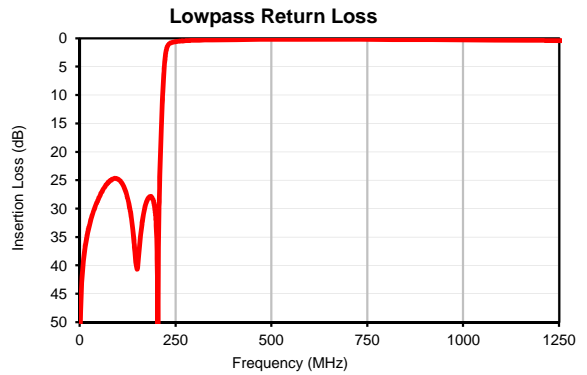
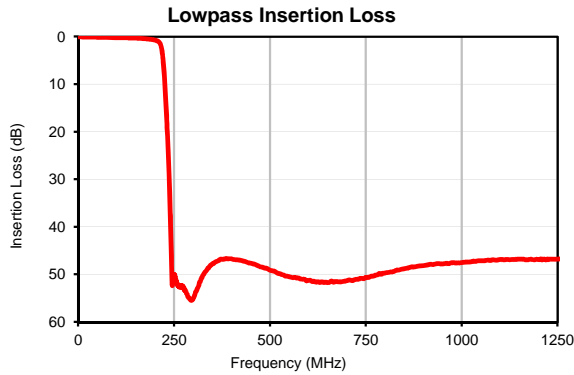
| | |
|-----------------|----------------------|
| Case style size | 1.243"X1.117"X0.630" |
|-----------------|----------------------|



Typical Performance Data

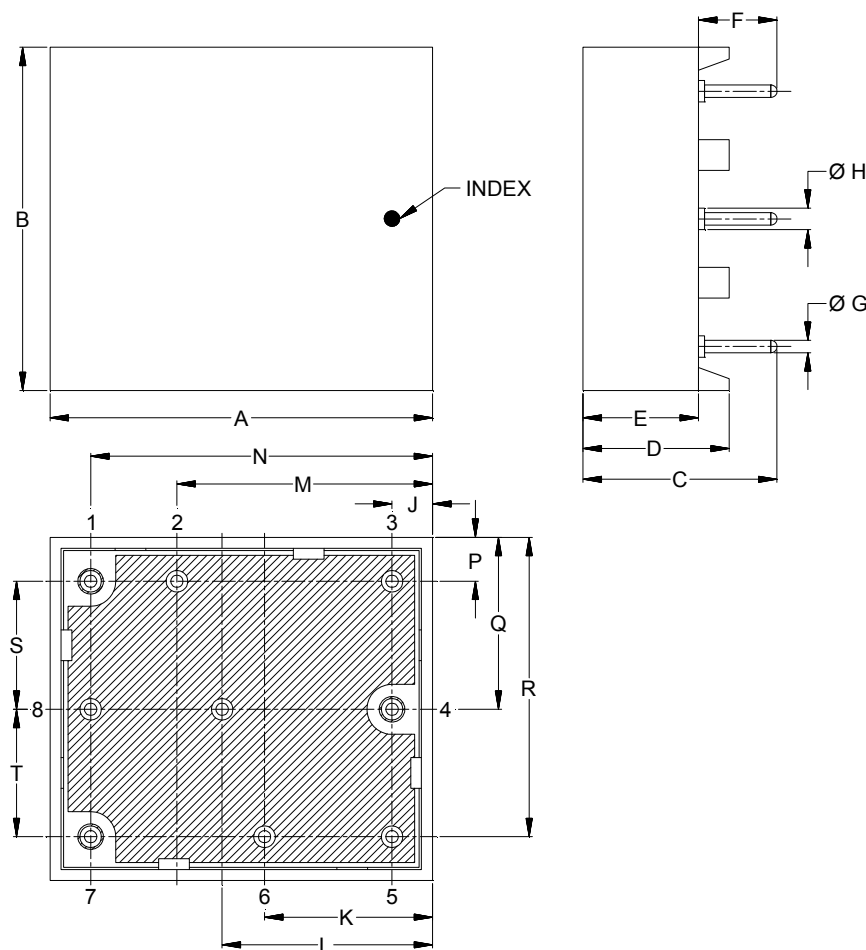
| FREQUENCY (MHz) | INSERTION LOSS (dB) | | Cross over isolation (dB) (between LPF and HPF) | RETURN LOSS (dB) | | |
|--------------------|---------------------------|---------------|---|------------------------|--------------|---------------|
| | Lowpass port | Highpass port | | Common port | Lowpass port | Highpass port |
| 1 | 0.00 | 96.64 | 82.38 | 52.15 | 51.18 | 0.00 |
| 50 | 0.11 | 73.04 | 70.04 | 26.42 | 28.01 | 0.02 |
| 204 | 0.80 | 49.29 | 48.30 | 44.50 | 47.76 | 0.48 |
| 215 | 1.78 | 46.27 | 47.04 | 12.14 | 11.61 | 0.58 |
| 219 | 3.39 | 40.23 | 44.37 | 6.70 | 6.31 | 0.63 |
| 224 | 7.93 | 30.76 | 41.26 | 2.97 | 2.60 | 0.71 |
| 225 | 9.18 | 28.92 | 41.00 | 2.59 | 2.21 | 0.73 |
| 230 | 16.62 | 20.55 | 41.26 | 1.72 | 1.19 | 0.88 |
| 232 | 20.02 | 17.56 | 41.95 | 1.66 | 1.02 | 0.99 |
| 237 | 29.95 | 10.84 | 45.52 | 2.11 | 0.80 | 1.60 |
| 245 | 52.33 | 3.44 | 57.40 | 6.23 | 0.63 | 5.63 |
| 250 | 50.07 | 1.65 | 52.63 | 12.45 | 0.57 | 11.59 |
| 258 | 52.04 | 0.92 | 51.42 | 32.90 | 0.50 | 28.65 |
| 280 | 53.46 | 0.59 | 52.90 | 29.73 | 0.39 | 28.57 |
| 400 | 46.73 | 0.34 | 46.50 | 26.29 | 0.22 | 26.48 |
| 500 | 49.11 | 0.33 | 48.59 | 25.52 | 0.18 | 25.58 |
| 750 | 50.58 | 0.37 | 50.79 | 27.61 | 0.17 | 26.81 |
| 1000 | 47.49 | 0.44 | 47.43 | 26.93 | 0.25 | 27.51 |
| 1100 | 46.85 | 0.47 | 47.34 | 29.11 | 0.31 | 32.84 |
| 1220 | 46.87 | 0.51 | 47.77 | 28.23 | 0.36 | 37.22 |

Typical Performance Curves



Outline Dimensions

QB2223



| CASE# | A | B | C | D | E | F | G | H | J | K |
|--------|------------------|------------------|-----------------|-----------------|----------------|----------------|----------------|----------------|----------------|-----------------|
| QB2223 | 1.243 (31.56) | 1.117 (28.36) | .630 (16.00) | .475 (12.07) | .375 (9.53) | .255 (6.48) | .040 (1.02) | .070 (1.78) | .132 (3.35) | .546 (13.87) |

| CASE# | L | M | N | P | Q | R | S | T | WT.GRAMS |
|--------|-----------------|-----------------|------------------|----------------|-----------------|-----------------|-----------------|-----------------|----------|
| QB2223 | .684 (17.37) | .831 (21.10) | 1.111 (28.22) | .143 (3.63) | .559 (14.21) | .974 (24.74) | .417 (10.58) | .415 (10.53) | 7 |

Dimensions are in inches (mm). Tolerances: 2 Pl. $\pm .015$; 3 Pl. $\pm .030$

Notes:

1. Cover material: Fortan PPS
2. Pin material: Brass alloy [C3604]
3. Pin finish: Gold flash
4. Tolerance on pin diameter $\pm .001$
5. Base: Printed wiring laminate.



P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 For detailed performance specs & shopping online see Mini-Circuits web site



The Design Engineers Search Engine Provides ACTUAL Data Instantly From MINI-CIRCUITS At: www.minicircuits.com

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