

DCG SERIES 1 GHz DIRECTIONAL COUPLERS

■ MODELS DCG-* : DCWG-* : DCG2-* : DCG4-*



MODEL DCG-*



MODEL DCWG-*



MODEL DCG2-*



MODEL DCG4-*

■ FEATURES

- 1 GHz Bandwidth
- 90 dB RFI Shielding
- Heavy Duty Diecast Case
- High Downstream Isolation (Tap-Out)
- Low Insertion Loss
- Precision Machined Threads

▼ CUSTOMER NOTES:

DCG SERIES DIRECTIONAL COUPLERS

The **DCG** line of high quality directional couplers have been developed for indoor or outdoor applications requiring high isolation. Numerous values and port configurations available to facilitate proper distribution system design.

DCG SERIES 1 GHz DIRECTIONAL COUPLERS

1 PORT MODELS (DCG-*)

* TAP VALUE	6	9	12	16	20	24	27	30
Insertion Loss (dB) (In - Out)								
5 - 47	2	1.5	1	.8	.8	.7	.7	.7
48 - 450	2	1.5	1	.8	.8	.6	.6	.6
451 - 750	2.3	1.6	1.3	1	1	.8	.8	.8
751 - 1000	2.5	2	1.5	1.2	1.2	1	1	1
Isolation (dB) (Out - Tap)								
5 - 47	25	30	30	35	40	40	40	41
48 - 450	25	25	28	30	35	40	40	40
451 - 750	22	24	25	28	30	35	35	40
751 - 1000	22	22	22	23	25	30	35	36

2 PORT MODELS (DCG2-*)

* TAP VALUE	9	12	16	20	24	27	30
Insertion Loss (dB) (In - Out)							
5 - 47	3.5	1.9	1.5	.7	.7	.7	.7
48 - 450	3.4	1.5	1.3	.6	.6	.6	.6
451 - 750	3.6	2	1.5	.8	.8	.8	.8
751 - 1000	4	2.2	1.7	1	1	1	1
Isolation (dB) (Out - Tap)							
5 - 47	25	35	35	40	45	45	45
48 - 450	25	25	30	35	40	40	40
451 - 750	22	24	28	30	35	35	35
751 - 1000	22	22	23	27	30	30	30

4 PORT MODELS (DCG4-*)

* TAP VALUE	8	12	16	20	24	30
Insertion Loss (dB) (In - Out)						
5 - 47	Self Term.	3.7	1.4	.9	.9	.9
48 - 450	Self Term.	3.9	1.3	.8	.8	.8
451 - 750	Self Term.	4	1.7	.9	.9	.9
751 - 1000	Self Term.	4.1	1.9	1.1	1.1	1.1
Isolation (dB) (Out - Tap)						
5 - 47	Self Term.	27	30	32	40	45
48 - 450	Self Term.	27	28	30	35	40
451 - 750	Self Term.	22	26	28	30	37
751 - 1000	Self Term.	21	23	25	29	34

GENERAL	5 - 47 (MHZ)	48 - 450 (MHZ)	451 - 750 (MHZ)	751 - 1000 (MHZ)
Input Return Loss (dB)	18	20	20	18
Output Return Loss (dB)	18	20	20	18
Tap Return Loss (dB)	20	20	20	20

NOTE: All specifications typical unless otherwise noted

DCG-^{*}SB SERIES DIRECTIONAL COUPLERS

■ MODELS DCG-^{*}SB : DCWG-^{*}SB : DCG2-^{*}SB : DCG4-^{*}SB



MODEL DCG-^{*}SB



MODEL DCWG-^{*}SB



MODEL DCG2-^{*}SB



MODEL DCG4-^{*}SB

■ FEATURES

- 1 GHz Bandwidth
- 130 dB RFI Shielding (Solderback)
- PCB Design
- High Downstream Isolation (Tap-Out)
- High Return Loss
- Precision Machined Threads

▼ CUSTOMER NOTES:

DCG-^{*}SB SERIES HIGH PERFORMANCE DIRECTIONAL COUPLERS

The **DCG-SB Series** of high quality directional couplers have been developed to support the latest advancements in distribution requirements. High return loss and low insertion loss make the **DCG-SB Series** ideal for any application. Advanced PCB design assures consistent performance.

DCG-* SB SPECIFICATIONS

1 PORT MODELS (DCG-* SB)

* TAP VALUE	6	9	12	16	20	24	27	30
Insertion Loss (dB) (In - Out)								
5 - 47	2	1.5	1	.8	.8	.7	.7	.7
48 - 450	2	1.5	1	.8	.8	.6	.6	.6
451 - 750	2.3	1.6	1.3	1	1	.8	.8	.8
751 - 1000	2.5	2	1.5	1.2	1.2	1	1	1
Isolation (dB) (Out - Tap)								
5 - 47	25	30	30	35	40	40	40	41
48 - 450	25	25	28	30	35	40	40	40
451 - 750	22	24	25	28	30	35	35	40
751 - 1000	22	22	22	23	25	30	35	36

2 PORT MODELS (DCG2-* SB)

* TAP VALUE	9	12	16	20	24	27	30
Insertion Loss (dB) (In - Out)							
5 - 47	3.5	1.9	1.5	.7	.7	.7	.7
48 - 450	3.4	1.5	1.3	.6	.6	.6	.6
451 - 750	3.6	2	1.5	.8	.8	.8	.8
751 - 1000	4	2.2	1.7	1	1	1	1
Isolation (dB) (Out - Tap)							
5 - 47	25	35	35	40	45	45	45
48 - 450	25	25	30	35	40	40	40
451 - 750	22	24	28	30	35	35	35
751 - 1000	22	22	23	27	30	30	30

4 PORT MODELS (DCG4-* SB)

* TAP VALUE	8	12	16	20	24	30
Insertion Loss (dB) (In - Out)						
5 - 47	Self Term.	3.7	1.4	.9	.9	.9
48 - 450	Self Term.	3.9	1.3	.8	.8	.8
451 - 750	Self Term.	4	1.7	.9	.9	.9
751 - 1000	Self Term.	4.1	1.9	1.1	1.1	1.1
Isolation (dB) (Out - Tap)						
5 - 47	Self Term.	27	30	32	40	45
48 - 450	Self Term.	27	28	30	35	40
451 - 750	Self Term.	22	26	28	30	37
751 - 1000	Self Term.	21	23	25	29	34

GENERAL	5 - 47 MHZ	48 - 450 MHZ	451 - 750 MHZ	751 - 1000 MHZ
Input Return Loss (dB)	18	20	20	18
Output Return Loss (dB)	18	20	20	18
Tap Return Loss (dB)	20	20	20	20

NOTE: All specifications typical unless otherwise noted