

# 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
<b>Insertion Loss (dB) (In - Out)</b>								
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
<b>Isolation (dB) (Out - Tap)</b>								
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
<b>Insertion Loss (dB) (In - Out)</b>							
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
<b>Isolation (dB) (Out - Tap)</b>							
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
<b>Insertion Loss (dB) (In - Out)</b>						
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
<b>Isolation (dB) (Out - Tap)</b>						
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