

# BI-DIRECTIONAL COUPLERS



## THROUGH HOLE (8 Pin Relay Header)

COUPLING (dB)	FREQUENCY RANGE LF-HF (MHz)	COUPLING FLATNESS (dB)	MAINLINE LOSS (dB)			DIRECTIVITY (dB)			VSWR TYP	PACKAGE	PIN-OUT (See Below)	MODEL
			LB TYP/MAX	MB TYP/MAX	UB TYP/MAX	LB TYP/MIN	MB TYP/MIN	UB TYP/MIN				
6.0 ± 0.5	10 - 100	± 0.25	1.5/2.0	1.5/2.0	1.5/2.0	30/25	30/25	30/25	1.2:1	120	1	KAP-241
11.5 ± 1.0	0.5 - 400	± 1.0	0.8/1.0	0.7/0.9	0.9/1.0	37/25	25/20	20/15	1.2:1	120	1	KBP-243
19.5 ± 1.0	0.5 - 400	± 1.0	0.3/0.5	0.4/0.5	0.5/0.6	35/25	33/20	25/15	1.5:1	120	1	KDP-243

## THROUGH HOLE (TO-5 & TO-8)



COUPLING (dB)	FREQUENCY RANGE LF-HF (MHz)	COUPLING FLATNESS (dB)	MAINLINE LOSS (dB)			DIRECTIVITY (dB)			VSWR TYP	PACKAGE	PIN-OUT (See Below)	MODEL
			LB TYP/MAX	MB TYP/MAX	UB TYP/MAX	LB TYP/MIN	MB TYP/MIN	UB TYP/MIN				
6.0 ± 0.5	10 - 100	± 0.25	1.5/2.0	1.5/2.0	1.5/2.0	30/25	30/25	30/25	1.2:1	104	2	KAP-541
6.0 ± 0.5	10 - 100	± 0.25	1.5/2.0	1.5/2.0	1.5/2.0	30/25	30/25	30/25	1.2:1	127	3	KAP-841
10.8 ± 1.0	10 - 500	± 0.7	0.6/1.0	0.8/1.2	0.8/1.6	30/25	25/20	25/17	1.3:1	104	2	KBP-543
10.8 ± 1.0	10 - 500	± 0.7	0.6/1.0	0.8/1.2	0.8/1.6	30/25	25/20	25/17	1.3:1	127	3	KBP-843
20.0 ± 1.0	10 - 500	± 0.5	0.3/0.5	0.4/0.5	0.5/0.6	35/28	35/25	30/17	1.4:1	104	2	KDP-543
20.0 ± 1.0	10 - 500	± 0.5	0.3/0.5	0.4/0.5	0.5/0.6	35/28	35/25	30/17	1.4:1	127	3	KDP-843

Power rating (all models) = 1 Watt, max  
 \* Select connector suffix: "S" = SMA, "B" = BNC, "N" = Type N, "T" = TNC  
 Impedance, unless otherwise noted is 50 ohms.  
 For pin location and package outline drawings, see back pages.

PIN-OUT TABLE

	INPUT	OUTPUT	FORWARD COUPLED	REVERSE COUPLED	CASE GND
#1	6	3	4	1	All Other
#2	8	5	11	2	All Other
#3	1	2	4	3	5

LB=LF to 10 LF  
 MB=10 LF to HF/2  
 UB=HF/2 to HF



# BI-DIRECTIONAL COUPLERS



## FLAT-PACK

COUPLING (dB)	FREQUENCY RANGE LF-HF (MHz)	COUPLING FLATNESS (dB)	MAINLINE LOSS (dB)			DIRECTIVITY (dB)			VSWR TYP	PACKAGE	PIN-OUT (See Below)	MODEL
			LB TYP/MAX	MB TYP/MAX	UB TYP/MAX	LB TYP/MIN	MB TYP/MIN	UB TYP/MIN				
10.8 ± 0.7	10 - 500	± 0.5	1.0/1.3	1.0/1.4	1.2/1.6	28/23	28/24	23/20	1.2:1	101	4	KBF-143
20.3 ± 0.7	10 - 500	± 0.5	0.3/0.4	0.3/0.5	0.4/0.5	35/28	35/25	30/20	1.35:1	101	4	KDF-143



## COAXIAL CONNECTOR

COUPLING (dB)	FREQUENCY RANGE LF-HF (MHz)	COUPLING FLATNESS (dB)	MAINLINE LOSS (dB)			DIRECTIVITY (dB)			VSWR TYP	PACKAGE	PIN-OUT (See Below)	MODEL
			LB TYP/MAX	MB TYP/MAX	UB TYP/MAX	LB TYP/MIN	MB TYP/MIN	UB TYP/MIN				
6.0 ± 0.5	10 - 100	± 0.25	1.5/2.0	1.5/2.0	1.5/2.0	30/25	30/25	30/25	1.2:1	113	5	KAK-741*
10.0 ± 1.0	2 - 100	± 0.5	0.9/1.0	0.9/1.0	0.9/1.0	45/35	37/33	35/30	1.2:1	113	5	KBK-741*
10.8 ± 0.5	10 - 500	± 0.5	0.6/1.0	0.8/1.2	0.8/1.6	30/25	25/23	25/20	1.3:1	113	5	KBK-743*
11.5 ± 0.5	10 - 1000	± 1.1	1.5/1.8	1.6/1.9	1.6/2.0	45/30	28/23	20/15	1.4:1	113	5	KBK-744*
15.0 ± 1.0	2 - 100	± 0.5	0.4/0.5	0.3/0.5	0.4/0.6	35/30	35/30	33/30	1.3:1	113	5	KCK-741*
15.0 ± 1.0	10 - 500	± 0.75	0.5/0.8	0.7/1.0	0.8/1.2	35/25	33/25	30/25	1.3:1	113	5	KCK-743*
15.0 ± 1.0	5 - 1000	± 0.75	0.5/1.0	0.8/1.3	1.0/1.65	30/25	28/23	25/20	1.5:1	113	5	KCK-744*
20.0 ± 1.0	2 - 100	± 0.5	0.15/0.25	0.1/0.2	0.1/0.25	43/33	38/33	33/30	1.06:1	113	5	KDK-741*
20.0 ± 1.0	10 - 500	± 0.5	0.3/0.6	0.4/0.8	0.5/1.0	35/28	35/25	35/25	1.3:1	113	5	KDK-743*
20.0 ± 1.0	10 - 1000	± 1.0	0.1/0.2	0.3/1.0	1.0/1.5	30/23	25/18	20/15	1.3:1	113	5	KDK-744*

Power rating (Flat-Pack models) = 1 Watt, max  
Impedance, unless otherwise noted is 50 ohms.  
For pin location and package outline drawings, see back pages.

PIN-OUT TABLE

	INPUT	OUTPUT	FORWARD COUPLED	REVERSE COUPLED	CASE GND
#4	1	5	4	8	All Other
#5	1	4	2	3	-

LB=LF to 10 LF  
MB=10 LF to HF/2  
UB=HF/2 to HF