

# Couplers

0.5-18 GHz

## SMA Maximally Flat Miniature Stripline Coaxial Couplers

- Multi-Octave Frequency Coverage from 0.5 to 18 GHz
- Flat Frequency Response
- Small, Lightweight
- Operational to 105°C without Degradation (125°C storage)
- Designed for MIL Environments



### Specifications

SMA (F), 0.5 to 18 GHz, 50 W

FREQUENCY RANGE (GHz)	MODEL	COUPLING (dB)	DIRECTIVITY (dB min.)	INSERTION LOSS (dB)		VSWR		FREQUENCY SENSITIVITY* (dB max.)	MAXIMUM DEVIATION FROM NOMINAL (dB)	POWER		WEIGHT (max.)	
				EXCLUDING COUPLED POWER	TRUE <sup>‡</sup>	PRIMARY LINE (max.)	SECONDARY LINE (max.)			AVERAGE FORWARD (W)	AVERAGE REFLECTED (W)	oz.	gr.
0.5-2	4242-6	6	22	0.35	2.00	1.20	1.20	±0.5	±1.0	50	2	2.5	71
	4242-10	10	22	0.35	0.90	1.20	1.20	±0.5	±1.0	50	5	2.5	71
	4242-20	20	22	0.35	0.40	1.20	1.20	±0.5	±1.0	50	50	2.8	80
1-3.5	4243-6	6	20	0.35	2.00	1.20	1.20	±0.3	±1.0	50	2	1.5	41
	4243B-10	10	23	0.35	0.90	1.20	1.20	±0.5	±1.0	50	5	1.5	41
	4243-20	20	23	0.35	0.40	1.20	1.20	±0.4	±1.0	50	50	1.8	50
2-8	4244-6	6	20	0.50	2.20	1.30	1.30	±0.4	±1.0	50	2	1.0	29
	4244-10	10	20	0.35	0.90	1.25	1.25	±0.5	±1.0	50	5	1.0	29
	4244-20	20	20	0.35	0.40	1.25	1.25	±0.4	±1.0	50	50	1.0	29
	4244-30	30	20	0.40	0.40	1.25	1.25	±0.5	±1.0	50	50	1.3	35
4-12.4	4245B-6**	6	16	0.50	2.20	1.30	1.30	±0.4	±1.0	50	2	0.7	21
	4245B-10	10	16	0.50	1.20	1.30	1.30	±0.4	±1.0	50	5	0.7	21
	4245B-20	20	15	0.50	0.60	1.30	1.30	±0.5	±1.0	50	50	0.8	24
	4245B-30**	30	15	0.50	0.50	1.30	1.30	±0.5	±1.0	50	50	0.8	24
6-18	4246B-6	6	15	0.80	2.50	1.40	1.40	±0.5	±1.0	50	2	0.9	25
	4246B-10	10	15	0.60	1.20	1.40	1.40	±0.5	±1.0	50	5	0.9	25
	4246B-20	20	15	0.60	0.70	1.40	1.40	±0.5	±1.0	50	50	0.9	25
	4246B-30	30	12	0.60	0.60	1.40	1.40	±0.5	±1.0	50	50	0.9	25

\* Frequency Sensitivity included in coupling value.

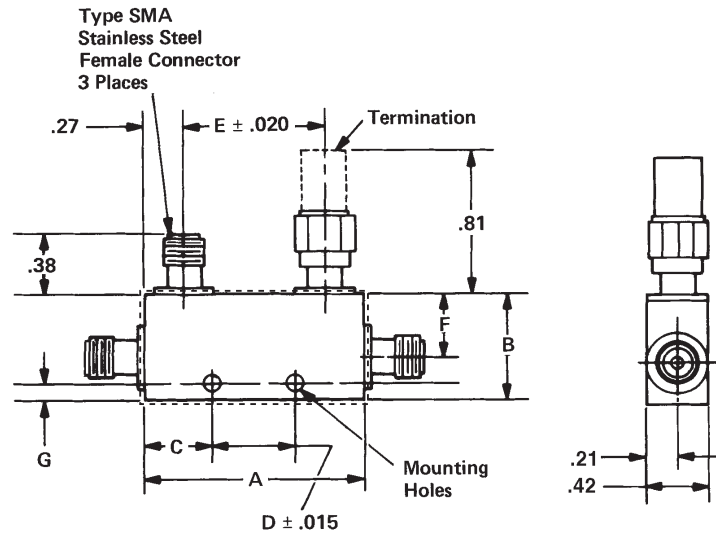
\*\* Special-order devices. Minimum quantity may apply.

‡ Typical true insertion loss at 5, 9, 19 and 29 dB

**NOTE:**

Peak Power for all models is 3 kW

## Outline Drawing



MODEL	A	B	C	D	E	F	G	MOUNTING HOLES (THRU)
4242-6, -10	3.54	1.04	.85	1.843	3.000	.77	.36	.146 ±.005
4242-20	4.04	1.04	.77	2.500	3.500	.77	.16	.146 ±.005
4243-6, 4243B-10	2.92	.67	.48	1.968	2.384	.34	.15	.146 ±.005
4243-20	2.92	.85	.59	1.750	2.384	.50	.16	.146 ±.005
4244-6, -10, -20	1.81	.67	.47	.875	1.274	.34	.15	.146 ±.005
4244-30	2.12	.82	.62	.875	1.584	.52	.11	.104 +.004/-0.002
4245B-6, -10, -20, -30	1.26	.58	.44	.375	.719	.34	.11	.104 +.004/-0.002
4246B-6, -10, -20, -30	1.40	.66	.45	.500	.860	.39	.11	.104 +.004/-0.002

Allow .020 max. build-up of sealant per surface.  
Dimensions in inches, unless otherwise specified.

