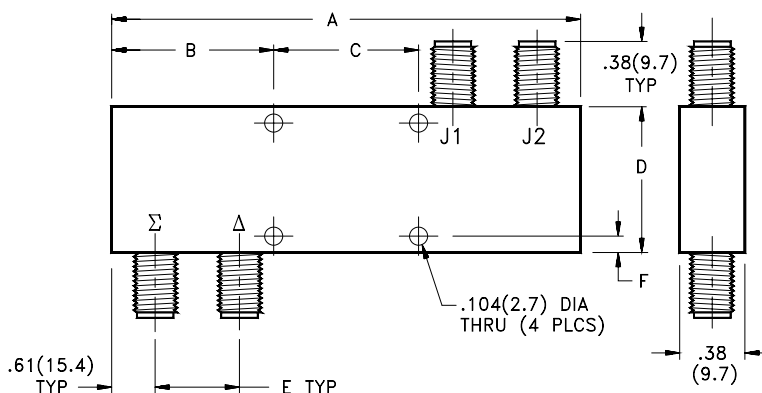


1 - 18.0 GHz - Ultrabroadband Performance

- High Isolation
- Excellent Phase and Amplitude Balance
- Rugged Stripline Construction
- Meets MIL-E-5400 and MIL-E-16400

Midwest Microwave's series of high performance 180° Hybrid Couplers (Magic T's) provide an important function in any system where power combining or division is required. A signal applied at the sum (Σ) port will divide into two equal amplitude, in phase signals at the output ports. Conversely, a signal applied at the difference (Δ) port will result in two equal amplitude but 180° out of phase signals at the output ports. In addition, if two coherent signals are simultaneously applied at the output ports, the vectoral sum of those two signals will appear at the sum (Σ) port and the vectoral difference between the two signals will appear at the difference (Δ) port.



ELECTRICAL SPECIFICATIONS

FREQUENCY RANGE (GHz)	CASE STYLE	MODEL NUMBER	AMPLITUDE BALANCE (dB)	INSERTION LOSS (dB) max	ISOLATION (dB) min	VSWR max	POWER (In) Avg (W)	Peak (kW)
2.0-8.0	1	HYB-5422-T3-SMA-79	+ 0.5	2.3	18	1.60	30	3
2.0-12.4	3	HYB-5425-T3-SMA-79	+ 0.7	2.3	15	2.00	30	3
1.0-12.4	2	HYB-5427-T3-SMA-79	+ 1.0	2.5	15	2.00	30	3
1.0-18.0	2	HYB-5431-T3-SMA-79	+ 1.5	4.5	12	2.50	20	2
2.0-18.0	3	HYB-5432-T3-SMA-79	+ 1.0	4.0	12	2.30	20	2

MECHANICAL SPECIFICATIONS - INCHES (mm)

CASE STYLE	A	B	C	D	E	F	WEIGHT Oz Gr	
1	3.04 (77.2)	0.093 (2.4)	N/A	1.35 (34.3)	0.53 (13.5)	0.67 (17.0)	2.8	78
2	6.13 (155.6)	2.06 (52.4)	2.00 (50.8)	2.50 (63.5)	0.75 (19.1)	0.093 (2.4)	9.5	270
3	3.91(99.3)	1.96 (49.7)	N/A	2.50 (63.5)	0.75 (19.1)	0.093 (2.4)	5.4	152

Note: TNC or Type N output connectors are available by substituting "TNC" or "NNN" for "SMA" in the Model Number.