

Two-, Four-, & Eight-Way Isolated Power Dividers Wilkinson

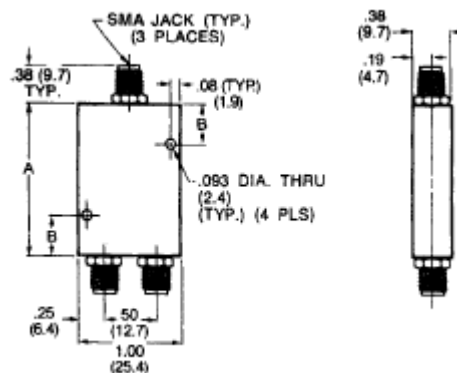
Rev. V4

Features

- Excellent Amplitude and Phase Balance
- High Isolation between Output Ports
- Low VSWR, Small Size and Light Weight
- Octave and Multi-Octave Frequency Coverage
- Power: 10 Watts Input Maximum with Matched Terminations

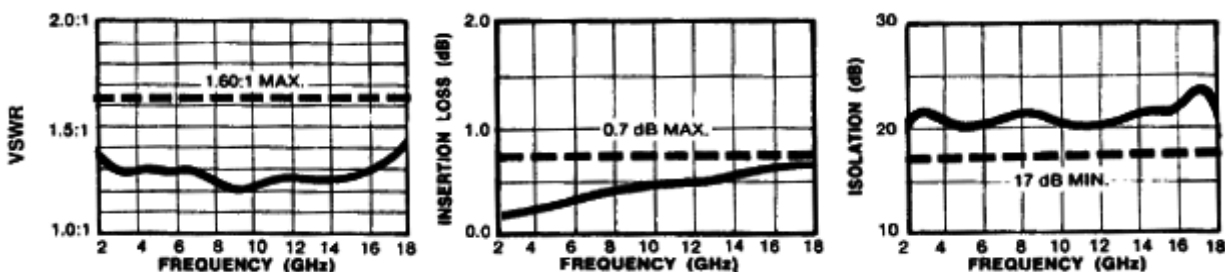
Description and Applications

This series of two-way, in-phase stripline power dividers demonstrates excellent performance as well as small size and light weight. These octave and multi-octave power dividers have high isolation, low VSWR and excellent amplitude and phase balance.



Note: All dimensions are $\pm .020$, except mounting hole diameters ($\pm .005$) and mounting hole location ($\pm .010$).

Typical Performance Part No. 2089-6208-00



Two-Way Isolated Power Divider Specifications

Part #	Frequency Range (GHz)	VSWR (max.)	Isolation dB (min.)	Insertion Loss dB (max.)	Output Unbalance		Input Power* (watts) (max.)	Size Inches (mm)		Weight	
					Amp. (dB)	Phase (deg.)		A	B	oz.	g
2089-6201-00	1.0-2.0	1.25	20	0.25	0.2	4.0	2.0	2.0 (50.8)	0.5 (12.7)	1.5	43
2089-6202-00	2.0-4.0	1.35	20	0.25	0.2	4.0	2.0	2.0 (50.8)	0.5 (12.7)	1.5	43
2089-6203-00	4.0-8.0	1.35	20	0.3	0.2	6.0	2.0	1.38 (35)	0.4 (10.2)	1.2	35
2089-6204-00	8.0-12.4	1.60	20	0.4	0.25	6.0	2.0	1.38 (35)	0.4 (10.2)	1.2	35
2089-6205-00	12.4-18.0	1.70	17	0.6	0.25	6.0	3.0	1.38 (35)	0.4 (10.2)	1.2	35
2089-6206-00	0.5-2.0	1.30	20	0.4	0.2	4.0	4.0	2.8 (71.2)	1.4 (35.6)	2.0	57
2089-6207-00	2.0-8.0	1.50	18	0.4	0.25	8.0	4.0	2.25 (57.2)	0.5 (12.7)	1.3	37
2089-6208-00	2.0-18.0	1.60	17	1.0	0.25	8.0	10.0	2.25 (57.2)	0.5 (12.7)	1.3	37
2089-6209-00	4.0-18.0	1.60	17	0.6	0.25	8.0	4.0	1.63 (41.4)	0.5 (12.7)	1.3	37
2089-6210-00	7.0-18.0	1.70	17	0.6	0.25	8.0	3.0	1.38 (35)	0.4 (10.2)	1.2	35

* Maximum input power with output loads of VSWR $\leq 2.0:1$. Derate to 10% of listed value when arbitrarily terminated.

M/A-COM Technology Solutions Inc. (MACOM) and its affiliates reserve the right to make changes to the product(s) or information contained herein without notice. Visit www.macom.com for additional data sheets and product information.

Two-, Four-, & Eight-Way Isolated Power Dividers Wilkinson

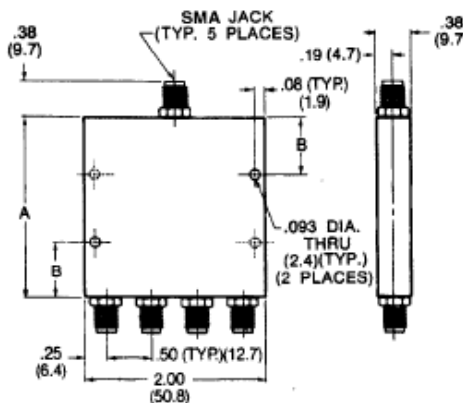
Rev. V4

Features

- Octave and Multi-Octave Frequency Coverage
- Low Insertion Loss
- Excellent Phase Balance
- High Isolation between Output Ports
- Low VSWR
- Power: 20 Watts Maximum

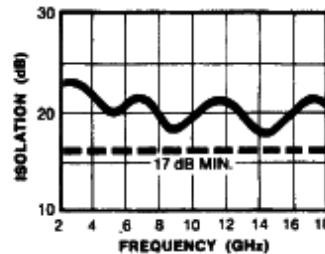
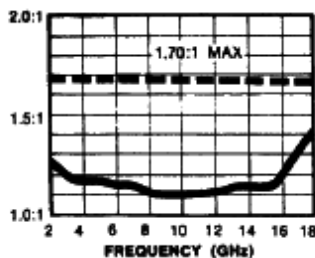
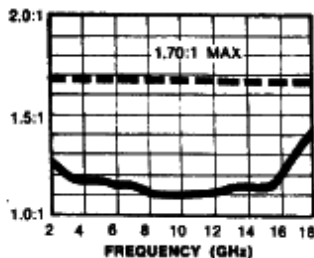
Description and Applications

These four-way in-phase power dividers combine excellent strip transmission line design techniques with small size and light weight and still achieve superb performance over wide multi-octave frequency ranges as well as over single octave bandwidths. These units may be used in reverse to combine in-phase signals applied to them. They can be custom designed to your particular application.



Note: All dimensions are $\pm .020$, except mounting hole diameters ($\pm .005$) and mounting hole location ($\pm .010$).

Typical Performance Part No. 2089-6408-00



Four-Way Isolated Power Divider Specifications

Part #	Frequency Range (GHz)	VSWR (max.)	Isolation dB (min.)	Insertion Loss dB (max.)	Output Unbalance		Input Power* (watts) (max.)	Size, Inches (mm)		Weight	
					Amp. (dB)	Phase (deg.)		A	B	oz.	g
2089-6401-00**	1.0-2.0	1.35	20	0.50	0.40	6	4.0	3.0 (76.2)	0.63 (15.9)	4.0	115
2089-6402-00	2.0-4.0	1.35	20	0.50	0.40	6	4.0	2.0 (50.8)		2.8	80
2089-6403-00	4.0-8.0	1.50	20	0.50	0.40	8	4.0	2.0 (50.8)		2.8	80
2089-6404-00	8.0-12.4	1.70	18	0.75	0.50	8	4.0	2.0 (50.8)		2.8	80
2089-6405-00	12.4-18.0	1.70	15	1.20	0.50	8	6.0	2.0 (50.8)		2.8	80
2089-6406-00	0.5-2.0	1.45	20	0.70	0.40	6	4.0	2.92 (74.2)		4.0	115
2089-6408-00	2.0-18.0	1.70	17	1.80	0.50	12	20.0	3.0 (76.2)		4.0	115
2089-6409-00	4.0-18.0	1.70	15	1.20	0.50	12	8.0	2.0 (50.8)		2.8	80
2089-6410-00	7.0-18.0	1.60	15	1.20	0.50	12	6.0	2.0 (50.8)		2.8	80

* Maximum input power with output loads of $VSWR \leq 2.0:1$. Derate to 10% of listed value when arbitrarily terminated.

** These units have four mounting holes symmetrically located as shown.

Two-, Four-, & Eight-Way Isolated Power Dividers Wilkinson

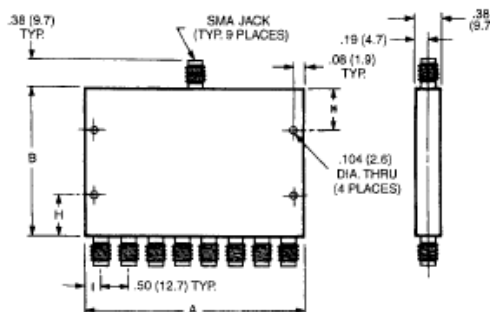
Rev. V4

Features

- Octave and Multi-Octave Frequency Coverage
- Excellent Amplitude and Phase Balance
- Low Insertion Loss
- Low VSWR

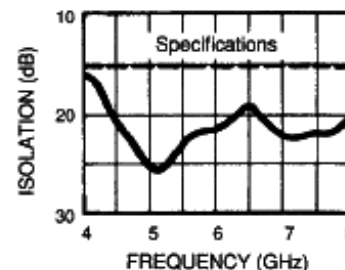
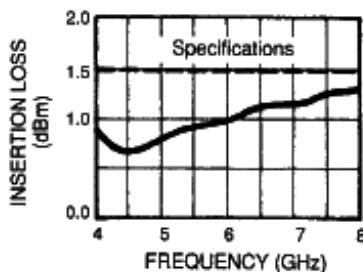
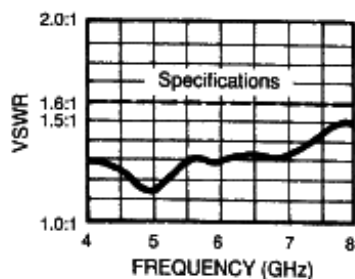
Description and Applications

These eight-way in-phase power dividers combine reliable strip transmission line design techniques with small size and light weight to achieve excellent performance over octave and multi-octave frequency ranges. They may also be used to combine in-phase signals applied at the outputs. SMA female connectors are standard.



All dimensions are $\pm .020$, except mounting hole diameters ($\pm .005$) and mounting hole location ($\pm .010$).

Typical Performance Part No. 2089-6803-00



Eight-Way Isolated Power Divider Specifications

Part #	Frequency Range (GHz)	VSWR (max.)	Isolation dB (min.)	Insertion Loss dB (max.)	Output Unbalance		Input Power* (watts) (max.)	Size Inches				Weight (nom.) oz.
					Amp. (dB)	Phase (deg.)		A	B	H	I	
2089-6801-00	1.0-2.0	1.5:1	20	1.0	0.8	8	6.0	4.5	5.0	1.0	0.50	15
2089-6803-00	4.0-8.0	1.6:1	15	1.5	0.8	16	6.0	4.0	2.0	0.5	0.25	12
2089-6804-00	8.0-12.4	1.7:1	15	1.7	0.8	16	6.0	4.0	2.0	0.5	0.25	12
2089-6805-00	12.4-18.0	1.7:1	15	2.2	0.8	24	10.0	4.0	2.0	0.5	0.25	12
2089-6807-00	2.0-8.0	1.6:1	15	2.0	1.2	16	12.0	4.0	2.0	0.5	0.25	12
2089-6808-00	2.0-18.0	1.8:1	15	3.3	1.8	24	30.0	4.5	5.0	1.0	0.50	15
2089-6810-00	7.0-18.0	1.8:1	15	2.5	1.5	24	10.0	4.0	2.0	0.5	0.25	12

* Maximum input power with output loads of VSWR $\leq 2.0:1$. Derate to 10% of listed value when arbitrarily terminated.