

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

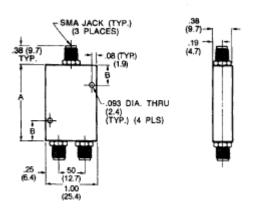
Rev. V3

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**

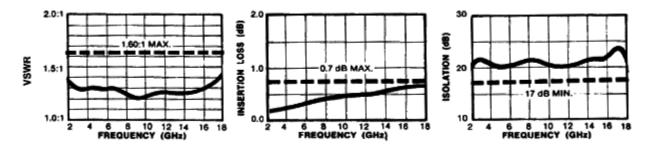
Description and Applications

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 No.			Isolation Insertion Loss		Output Unbalance		Maxi- mum	Size, Inch	Weight		
	(GHz)		(min.)	dB (max.)	Amp. (dB)	Phase (deg.)	Input Power* (watts)	A	В	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 ≤2.0:1. Derate to 10% of listed value when arbitrarily terminated.

typical. Mechanical outline has been fixed. Engineering samples and/or test data may be available. Commitment to produce in volume is not guaranteed.

[•] India Tel: +91.80.4155721 Visit www.macomtech.com for additional data sheets and product information.



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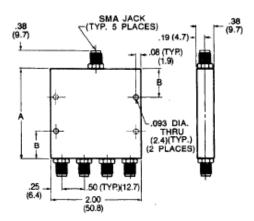
Rev. V3

Features

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

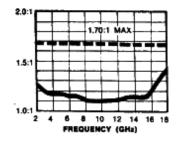
Description and Applications

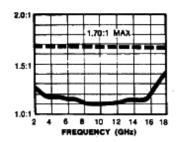
These four-way in-phase power dividers combine excellent strip transmission line design techniques with small size and light weight and still achieve superb performance over wide multi-octave frequency ranges as well as over single octave bandwidths. These units may be used in reverse to combine inphase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

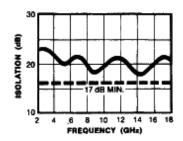


Note: All dimensions are \pm .020, except mounting hole diameters $(\pm \ .005)$ and mounting hole location $(\pm \ .010)$.

Typical Performance Part No. 2089-6408-00







Four-Way Isolated Power Divider Specifications

Part No.	Range (max.) dB (min.) Loss		10010111	Insertion Loss	Output Unbalance		Maxi- mum	Size, Inches (mm)		Weight	
		dB (max.)	Amp. (dB)	Phase (deg.)	Input Power* (watts)	Α	В	oz.	g		
2089-6401-00**	1.0-2.0	1.35	20	0.50	0.40	6	4.0	3.0 (76.2)		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)	0.63 (15.9)	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
2089-6407-00	2.0-8.0	1.60	18	0.80	0.50	12	8.0	4.0 (102)		5.2	149
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 <2.0:1. Derate to 10% of listed value when arbitrarily terminated.

Commitment to produce in volume is not guaranteed.

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

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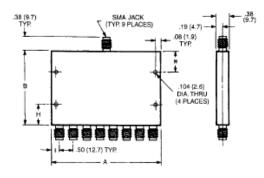
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Features

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

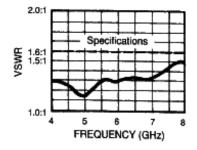
Description and Applications

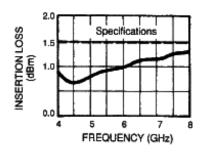
These eight-way in-phase power divides combine reliable strip transmission line design techniques with small size and light weight to achieve excellent performance over octave and multi-octave frequency ranges. They may also be used to combine in-phase signals applied at the outputs. SMA female connectors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

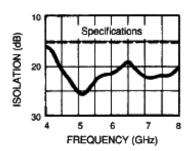


All dimensions are ± .020, except mounting hole diameters (± .005) and mounting hole location (\pm .010) .

Typical Performance Part No. 2089-6803-00







Eight-Way Isolated Power Divider Specifications

Part No.	Frequency Range	VSWR (max.)	Isolation dB (min.)	Insertion Loss dB (max.)	Output Unbalance		Maximum Input	Size, Inches				Weight (NOM.)
	(GHz)				Amp. (dB)	Phase (deg.)	Power* (watts)	Α	В	Н	1	oz.
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
2089-6802-00	2.0-4.0	1.5:1	18	1.0	0.8	10	6.0	4.0	2.0	0.5	0.25	12
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
2089-6806-00	0.5-2.0	1.5:1	20	1.5	0.8	8	12.0	4.5	5.0	1.0	0.50	15
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 ≤2.0:1. Derate to 10% of listed value when arbitrarily terminated.

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