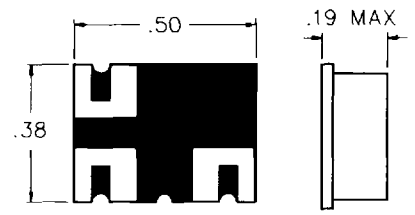
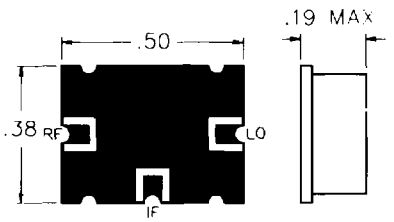
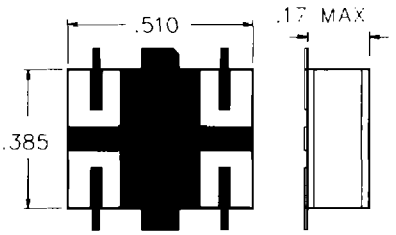
RF and IF Signal Processing Components



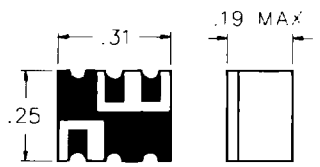
STYLE –01



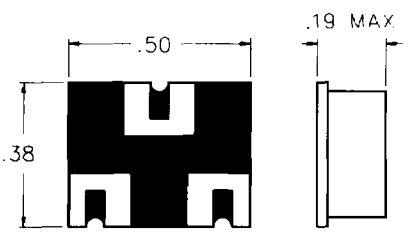
STYLE –02



STYLE –03
(HERMETICALLY SEALED)



STYLE –04/–08



STYLE –05

Power Splitters (See Style –01)

MODEL #	FREQUENCY	AMP BAL	PHASE BAL	ISO	IMPEDANCE
SPL/2BE-01	4-1000 MHz	0.1 dB typ	1 DEGREE	25 dB	50 ohms
SPL/2BE-01/75	4-1000 MHz	0.1 dB typ	1 DEGREE	25 dB	75 ohms
SPL/2EF-01	500-2000 MHz	0.1 dB typ	2 DEGREE	18 dB	50 ohms
SPL/2EF-01/75	500-2000 MHz	0.1 dB typ	2 DEGREE	18 dB	75 ohms
SPL/2BF-01	4-2000 MHz	0.1 dB typ	3 DEGREE	22dB	50 ohms
SPL/2BF-01/75	4-2000 MHz	0.1 dB typ	3 DEGREE	22 dB	75 ohms
Also available in package styles –03, –04, –08, –12, –17, –18 & –22.					

Directional Couplers (See Style –01)

MODEL #	FREQUENCY	LOSS	COUPLING	VSWR	DIRECTIVITY
CPL/10BE-01	5-1000 MHz	0.5 dB typ	10 dB NOM	1.3:1	20 dB TYP
CPL/20BE-01	5-1000 MHz	0.5 dB typ	20 dB NOM	1.3:1	20 dB TYP
CPL/20EF-01	500-2000 MHz	0.25 dB typ	20 dB NOM	1.3:1	18 dB TYP
CPL/16EF-01	500-2000 MHz	0.25 dB typ	16 dB NOM	1.3:1	18 dB TYP
Also available in package styles –01, –12, –17, –18 & –22.					

General Purpose Mixers (See Style –02)

MODEL #	RF/LO FREQ	IF FREQ	IP3	LO POWER
MXR/2AD-02	0.1-500 MHz	DC-500 MHz	+12 dBm	+7 dBm
MXR/3AD-02	0.1-500 MHz	DC-500 MHz	+15 dBm	+10 dBm
MXR/2BE-02	1-1000 MHz	DC-1000 MHz	+12 dBm	+7 dBm
MXR/3BE-02	1-1000 MHz	DC-1000 MHz	+15 dBm	+10 dBm
MXR/5BE-02	1-1000 MHz	DC-1000 MHz	+21 dBm	+17 dBm
MXR/8BE-02	1-1000 MHz	DC-1000 MHz	+32 dBm	+27 dBm
MXR/2CF-02	10-2000 MHz	5-1000 MHz	+12 dBm	+7 dBm
MXR/3CF-02	10-2000 MHz	5-1000 MHz	+15 dBm	+10 dBm
MXR/5CF-02	10-2000 MHz	5-1000 MHz	+21 dBm	+17 dBm
MXR/8CF-02	10-2000 MHz	5-1000 MHz	+32 dBm	+27 dBm
Also available in package styles –03, –4, –12, –17, –18 & –22.				

Voltage Variable Phase Shifters (See Style –05)

MODEL #	CENTER FREQ	PHASE SHIFT	LOSS	VSWR	CONTROL
PSV/150A-05	150 MHz	180 deg	0.5 dB typ	1.3:1 typ	0 to + 15 V
PSV/400B-05	400 MHz	150 deg	0.7 dB typ	1.3:1 typ	0 to + 15 V
PSV/800C-05	800 MHz	120 deg	0.9 dB typ	1.4:1 typ	0 to + 15 V
PSV/1620F-05	1620 MHz	60 deg	1.1 dB typ	1.5:1 typ	0 to + 15 V
Also available in package styles –12, –18, & –22. Available at any center frequency from 10 MHz to 2000 MHz.					

Voltage Variable Attenuators (See Style –05)

MODEL #	CENTER FREQ	ATTENUATION	LOSS	CONTROL
ATV/150E-05	150 MHz	18 dB MIN	0.5 dB typ	0 to + 5 V
ATV/400F-05	400 MHz	15 dB MIN	0.7 dB typ	0 to + 5 V
ATV/800G-05	800 MHz	12 dB MIN	0.9 dB typ	0 to + 5 V
ATV/1620H-05	1620 MHz	10 dB MIN	1.1 dB typ	0 to + 5 V
Also available in package styles –12, –18, & –22. Available at any center frequency from 10 MHz to 2000 MHz.				

Also available in similar package styles:

- Quadrature & Junction Hybrids
- Matching Transformers & Baluns
- I/Q Networks

Call for additional information or to discuss your custom requirements.

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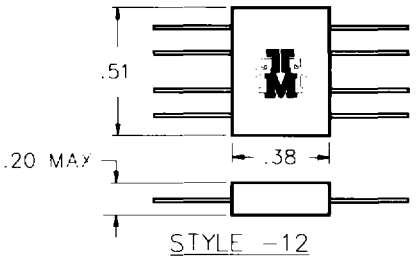
RF and IF Signal Processing Components

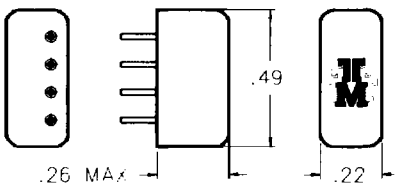


STYLE –12

High Dynamic Range Mixers (See Style –02)

MODEL #	RF/LO FREQ	IF FREQ	LO POWER	IP3 INPUT
MXR/6EE-02HD	800-1000 MHz	10-200 MHz	+17 dBm	+32 dBm typ
MXR/6EF-02HD	1000-2000 MHz	10-200 MHz	+17 dBm	+30 dBm typ
MXR/3CF-02HD	10-2000 MHz	5-1000 MHz	+10 dBm	+21 dBm typ
MXR/7EE-02HD	800-1000 MHz	10-200 MHz	+21 dBm	+34 dBm typ
MXR/7EF-02HD	1000-2000 MHz	10-200 MHz	+21 dBm	+32 dBm typ

Also available in package styles –03, –12, –18 & –22.
Consult factory if you have a specific frequency plan not shown.

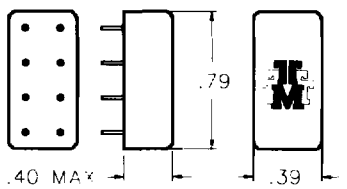


STYLE –17

Quadrature Hybrids (See Style –01)

MODEL #	FREQUENCY	BANDWIDTH	QUADRATURE	LOSS	VSWR
QHB/10-01	10 MHz	10%	90°±1°	0.25 dB	1.3:1 typ
QHB/70-01	70 MHz	10%	90°±1°	0.25 dB	1.3:1 typ
QHB/140-01	140 MHz	10%	90°±2°	0.30 dB	1.3:1 typ
QHB/400-01	400 MHz	10%	90°±3°	0.35 dB	1.4:1 typ
QHB/700-01	700 MHz	10%	90°±4°	0.50 dB	1.5:1 typ

Also available in package styles –03, –12, & –22.
Specific center frequencies available. Octave bandwidths available.

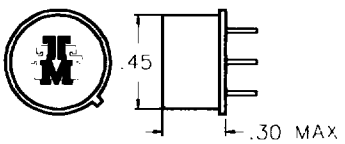


STYLE –18

180° Hybrid Junction (See Style –12)

MODEL #	FREQUENCY	LOSS	AMP BAL	PHASE BAL
JHB/1BC-12	5-100 MHz	0.6 dB typ	0.2 dB typ	2 DEG typ
JHB/1CD-12	10-200 MHz	0.6 dB typ	0.2 dB typ	2 DEG typ
JHB/1CE-12	50-500 MHz	0.7 dB typ	0.3 dB typ	3 DEG typ
JHB/1DE-12	100-750 MHz	0.9 dB typ	0.5 dB typ	5 DEG typ

Also available in package styles –03, –15, –18 & –22.

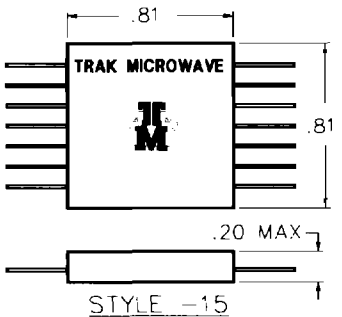


STYLE –22

Matching Transformers & Baluns (See Style –04)

MODEL #	FREQUENCY	LOSS	PRIMARY	SECONDARY
TRF/1CE-O4	10-500 MHz	0.25 dB typ	50 ohms	50 ohms
TRF/2CE-O4	10-500 MHz	0.25 dB typ	50 ohms	112.5 ohms
TRF/3CE-O4	10-500 MHz	0.25 dB typ	50 ohms	200 ohms
TRFB/3CE-O4	10-500 MHz	0.25 dB typ	50 ohms	200 ohms*

Also available in numerous impedance ratios. * Balanced Output



STYLE –15

I/Q Demodulators (See Style –15)

MODEL #	RF/LO FREQ	LOSS	I/Q AMP BAL	I/Q PHS BAL
DIQ/IC-15/10	10 MHz	8 dB typ	±0.1 dB typ	±1 DEG typ
DIQ/IC-15/70	70 MHz	8 dB typ	±0.1 dB typ	±1 DEG typ
DIQ/ID-15/200	200 MHz	10 dB typ	±0.25 dB typ	±1 DEG typ
DIQ/ID-15/400	400 MHz	10 dB typ	±0.25 dB typ	±1 DEG typ

Also available in package styles –18, & SMD package styles.
LO power of +10 dBm standard. LO power up to +30 dBm available.

Decade Band Quad Hybrids (See Style –15)

MODEL #	FREQUENCY	LOSS	AMP BAL	PHASE BAL
QHB/D1-15	1.5-20 MHz	0.5 dB typ	0.1 dB typ	2 DEG typ
QHB/D10-15	10-100 MHz	0.5 dB typ	0.1 dB typ	2 DEG typ
QHB/D20-15	20-200 MHz	0.65 dB typ	0.2 dB typ	3 DEG typ
QHB/D50-15	50-500 MHz	0.75 dB typ	0.2 dB typ	5 DEG typ

Also available in connectorized packages (SMA or BNC)
Available in custom frequency bands to 1000 MHz.

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