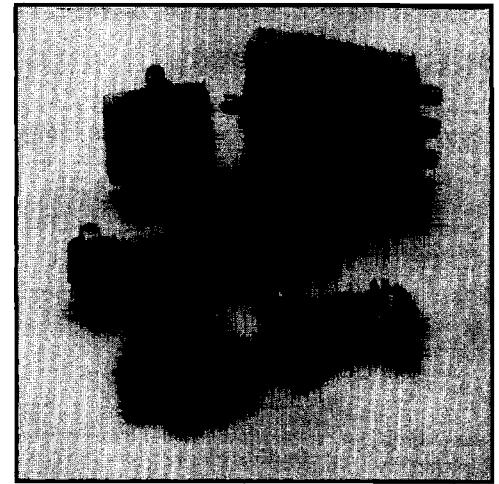


Rx POWER DIVIDERS AND Tx HYBRIDS (COMBINERS/SPLITTERS)

- Stock 2 and 4 Way with SMA and N Connectors
- Excellent Phase Balance and Minimum Group delay
- Exceptionally High Isolation, Low VSWR and Insertion Loss
- Power Divider/Isolator Networks (see page 33)
- Hybrid Combiner Assemblies (see page 33)



SPECIFICATIONS

High Power Quadrature Hybrids (Splitter/Combiners) with Type "N" Connectors

APPLICATION	FREQUENCY RANGE MHz	MODEL NO.	COUPLING (Nominal) dB	VSWR (Max)	ISOLATION dB (Min)	AMP BAL dB	PHASE BAL Degrees	POWER		WEIGHT	
								Avg Watts	Peak kW	Oz	Gr
CELLULAR	820-980	CEL3322	3	1.25	20	±0.2	5°	500	10	2	0.9
PCS	1710-2000	CEL3032	3	1.35	17	±0.25	5°	200	5	1.5	.68

Medium Power Quadrature Hybrids (Splitter/Combiners) with SMA Connectors

APPLICATION	FREQUENCY RANGE GHz	MODEL NO.	COUPLING (Nominal) dB	VSWR (Max)	ISOLATION dB (Min)	AMP BAL dB	PHASE BAL Degrees	POWER		WEIGHT	
								Avg Watts	Peak kW	Oz	Gr
CELLULAR	800-980	CEL4031	3 ⁺² ₋₀	1.25	20	±0.5	2°	50	5	1.4	40
PCS	1710-2200	CEL4032C	3 ⁺² ₋₀	1.20	20	±0.75	4°	50	5	0.70	20

2 and 4 Way In-Phase Rx Power Dividers with SMA Connectors

APPLICATION	FREQUENCY RANGE MHz	MODEL NO.	VSWR		INSERTION LOSS (Max) dB	ISOLATION dB (Min)	AMP BAL dB (Max)	PHASE BAL Degrees (Max)	MAX AVERAGE POWER (W)* into Load VSWR of			WEIGHT	
			Input (Max)	OUTPUT (Max)					<1.2:1	<2:1	∞	Oz	Gr
CELLULAR	800-980	CEL4322-2	1.25	1.15	0.2	20	0.3	1.0	30	10	1	2.0	55
PCS	1710-2200	CEL4322-2	1.25	1.15	0.2	20	0.3	1.0	30	10	1	2.0	55
CELLULAR	800-980	CEL4322-4	1.25	1.20	0.4	20	0.4	2.0	30	10	1	5.8	165
PCS	1710-2200	CEL4322-4	1.25	1.20	0.5	20	0.4	4.0	30	10	1	5.8	165
CELLULAR	800-980	CEL4311-2	1.25	1.15	0.4	27.5	0.1	0.5	30	20	3	1.1	30
PCS	1710-2000	CEL4312-2	1.25	1.15	0.3	22.5	0.1	1.0	30	20	3	0.9	23
CELLULAR	800-980	CEL4321-2	1.25	1.15	0.4	25	0.1	1.0	30	20	3	1.1	30
PCS	1710-2000	CEL4321-2	1.25	1.15	0.5	27.5	0.1	1.5	30	20	3	1.1	30
CELLULAR	800-980	CEL4311C-4	1.35	1.30	0.9	22.5	0.1	1.5	30	10	1	2.9	80
PCS	1710-2000	CEL4312C-4	1.35	1.25	0.8	20	0.3	3.0	30	10	3	2.0	56
CELLULAR	800-980	CEL4321C-4	1.25	1.15	1.0	30	0.1	1.0	30	10	1	2.9	80
PCS	1710-2000	CEL4321C-4	1.45	1.30	1.0	27.5	0.1	1.5	30	10	1	2.9	80

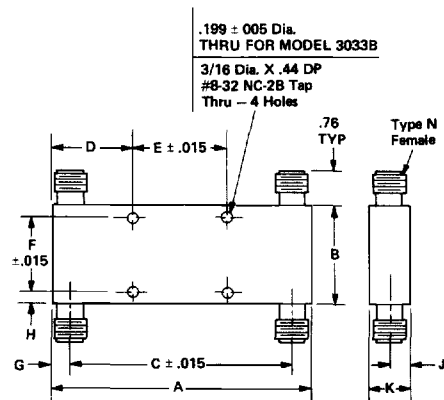
* IMPORTANT: Maximum Average Power is applicable only with coherent frequencies (same frequency each channel and in phase) otherwise derate to VSWR ∞ power rating

LORAL

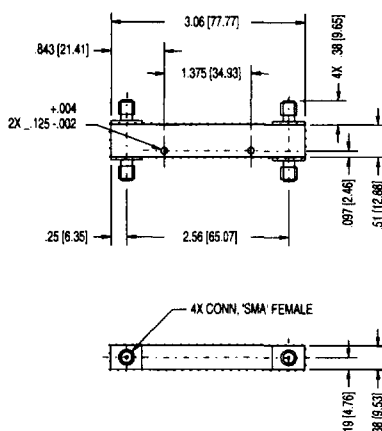
Microwave-Narda

435 MORELAND ROAD, HAUPPAUGE, NY 11788 • USA TEL: 516-231-1700 • INT'L: (1) 516-231-1390 • FAX (1) 516-231-1711

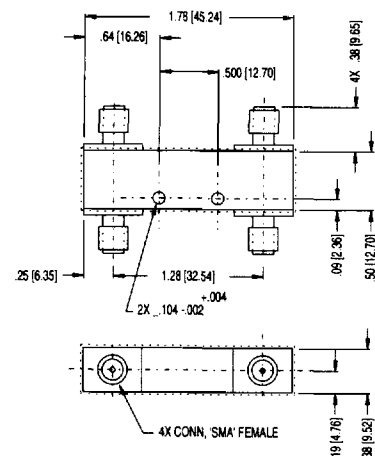
OUTLINE DRAWINGS



CEL 3032/3033

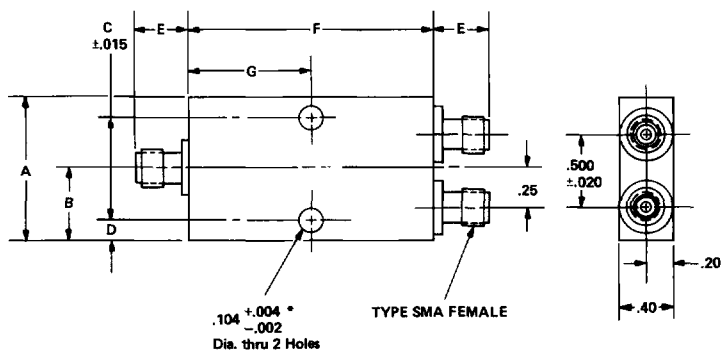


CEL 4031C

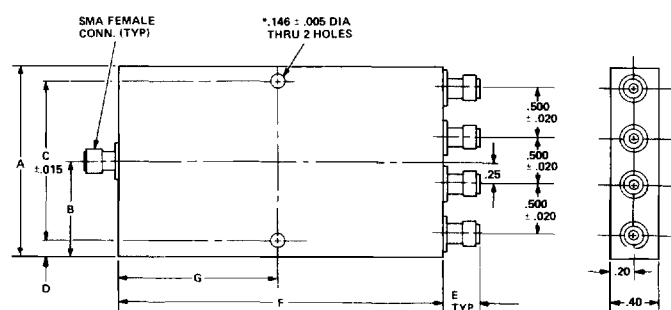


CEL 4032C

Model No.	A	B	C	D	E	F	G	H	J	K
CEL3032	5.51	2.11	4.750	1.77	2.000	1.605	.38	.27	.44	.88
CEL3322	5.52	2.60	3.32	.26	5.22	2.000	1.10	.30	.50	1.00
CEL4031C	3.06	.51	2.562 -.015	.85	1.375 -.015		.25	.10	.20	.39
CEL4032C	1.77	.51	1.281 -.015	.64	.500 -.015		.25	.10	.19	.39



Model No.	A	B	C	D	E	F	G
CEL4311-2	1.38	.69	1.146	.12	.41	1.24	.62
CEL4312-2	1.30	.65	1.068	.12	.41	.92	.46
CEL4321-2	1.38	.69	1.146	.12	.41	1.24	.62



Model No.	A	B	C	D	E	F	G
CEL4311-4	2.38	1.19	2.153	.12	.41	2.15	1.07
CEL4312-4	2.30	1.15	2.070	.12	.41	1.48	.74
CEL4321-4	2.38	1.19	2.153	.12	.41	2.15	1.07

J Holes: .104 ± .004 ± .002