

Non-Catalog Model

Directional Coupler

TODC-10-1

Important Note

This is a non-catalog model and can be manufactured on specific request.
Pricing and delivery information can be supplied upon request.

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CASE STYLE : QQ96

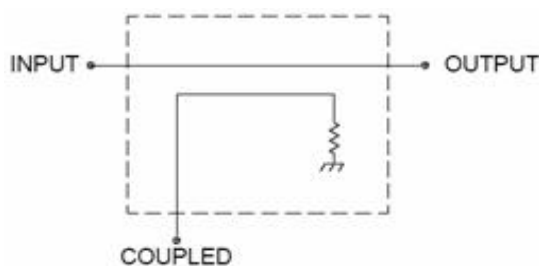
ELECTRICAL SPECIFICATIONS 50Ω @ +25°C					
Parameter		Min.	Typ.	Max.	Units
Frequency		10		400	MHz
Coupling	Nominal		11.3 ± 0.5		dB
	Flatness		± 0.5		dB
Mainline Loss *	10-100 MHz		1.20	1.50	dB
	100-200 MHz		1.00	1.30	dB
	200-400 MHz		1.20	1.50	dB
Directivity	10-100 MHz	25	35		dB
	100-200 MHz	20	30		dB
	200-400 MHz	20	25		dB
VSWR			1.5		(:1)
Power Input	10-100 MHz		0.5		W
	100-400 MHz		1.0		W

Notes: * Mainline loss includes theoretical coupled power loss of 0.335 dB at 11.3 dB coupling.

MAXIMUM RATINGS	
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C

PIN CONNECTIONS	
INPUT	5
OUTPUT	8
COUPLED FORWARD	2
NOT USED	11
CASE GND	All other pins

Functional Diagram



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Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	COUPLING (dB)	DIRECTIVITY (dB)	RETURN LOSS		
				IN	(dB) OUT	CPL
10.0	0.63	11.50	52.78	32.35	24.87	24.61
20.0	0.66	11.52	50.12	31.88	24.97	24.78
50.0	0.71	11.56	45.69	29.41	24.34	24.55
100.0	0.77	11.61	39.88	25.13	22.64	23.95
130.0	0.80	11.63	37.04	23.08	21.55	23.57
200.0	0.87	11.67	31.63	19.67	19.21	22.51
230.0	0.89	11.68	29.69	18.62	18.34	22.10
320.0	0.99	11.71	24.82	16.10	16.23	21.03
390.0	1.03	11.70	21.73	14.62	14.91	20.44
400.0	1.04	11.70	21.32	14.44	14.76	20.40

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Patent Pending

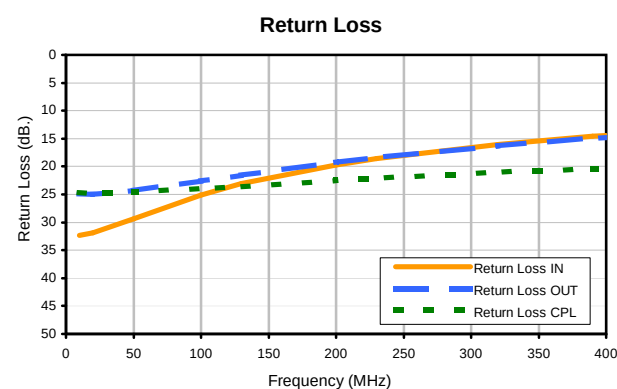
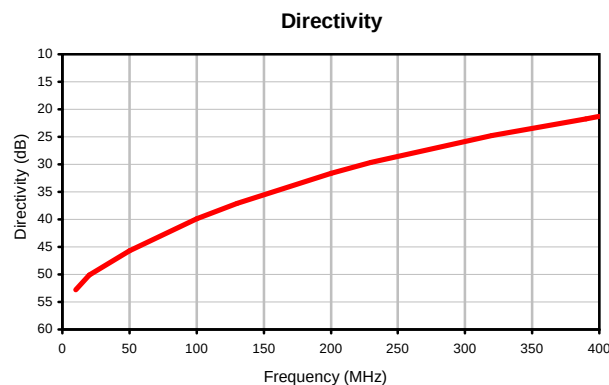
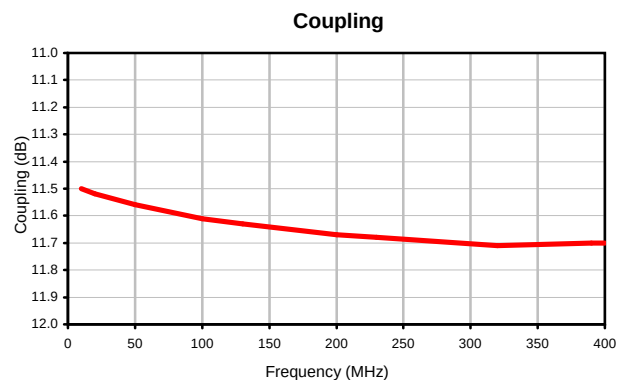
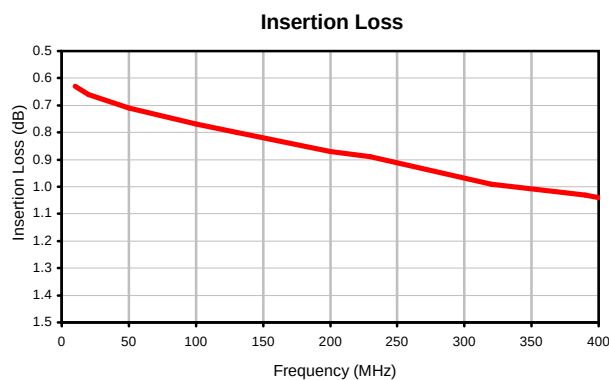
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Directional Coupler

Typical Performance Curves

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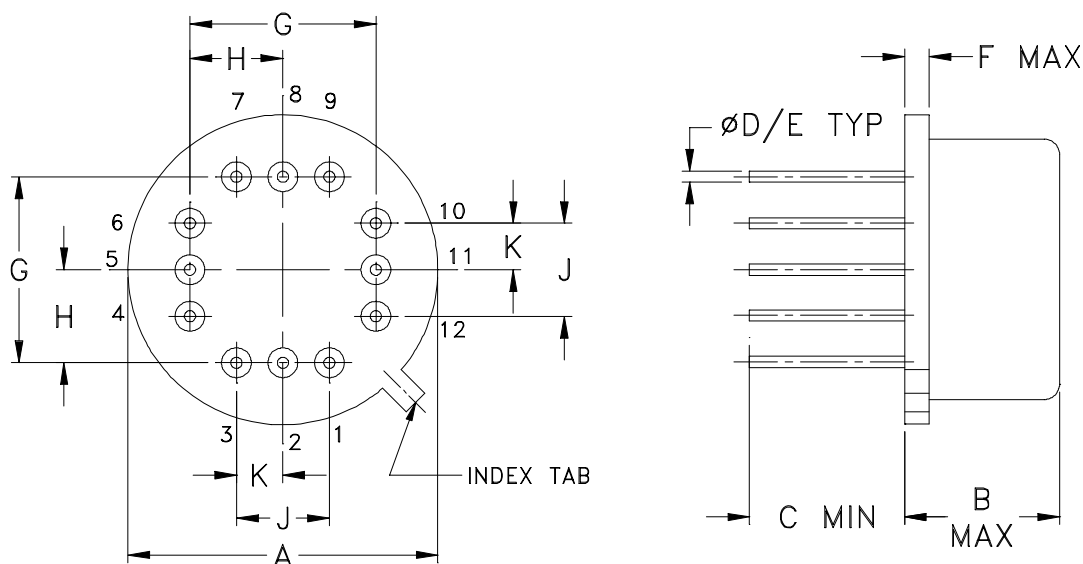


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Outline Dimensions



CASE#	A	B	C	D	E	F	G	H	J	K	WT. GRAM
QQ95	.500 (12.70)	.250 (6.35)	.25 (6.35)	.016 (.41)	.020 (.51)	.04 (1.02)	.300 (7.62)	.150 (3.81)	.150 (3.81)	.075 (1.91)	3.5
QQ96	.600 (15.24)						.400 (10.16)	.200 (5.08)	.200 (5.08)	.100 (2.54)	4.0

Dimensions are in inches (mm). Tolerances: 2 Pl. $\pm .03$; 3 Pl. $\pm .015$

Notes:

- Header material: Kovar.
Pin material: Kovar.
Cover material: Nickel.
- Pin finish: Gold plate 25 μ inches (.64 microns) min.
- For pin designations see specification data sheet.
- Pin numbers do not appear on unit, for reference only.