

## YT-ADCB-20-82+



50Ω, 20dB Coupling, 1 to 800 MHz

### THE BIG DEAL

- Very Flat Coupling, 0.2 dB
- Very Low Loss, 0.3 dB
- Small Size
- Aqueous washable

### APPLICATIONS

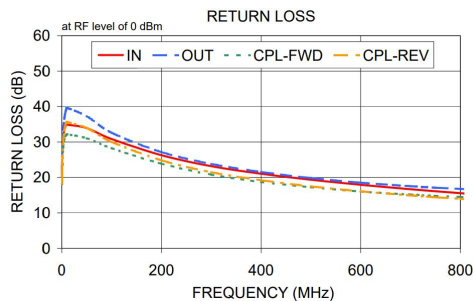
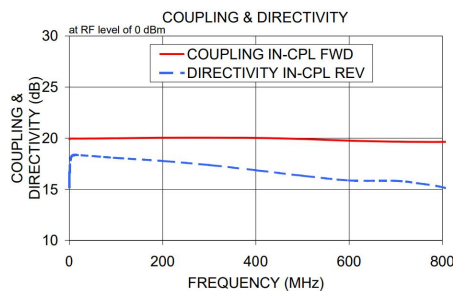
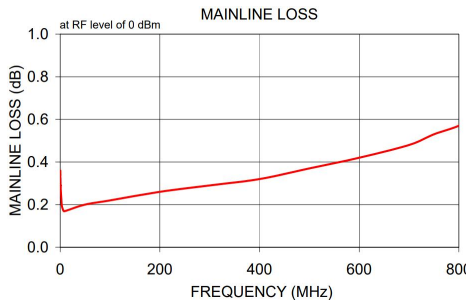
- Cable TV
- Communications

### ELECTRICAL SPECIFICATIONS AT 25°C

Parameter	Condition(MHz)	Min	Typ.	Max	Units
Frequency Range		1		800	MHz
Mainline Loss <sup>1</sup> (above theoretical 0.05 dB)	1	-	0.2	0.4	dB
	400	-	0.3	0.6	
	800	-	0.6	0.9	
Coupling	1	19.5	20.2	20.9	dB
	400	19.5	20.4	21.6	
	800	18.5	20.2	21.8	
Coupling Flatness(&plusmn;n)	1-400	-	0.2	0.6	dB
	400-800	-	0.2	0.7	
Directivity	1	15	20	-	dB
	400	14	24.4	-	
	800	10	15	-	
Return Loss (Input)	1	21	28	-	dB
	400	15	21	-	
	800	11	16	-	
Return Loss (Output)	1	21	27	-	dB
	400	15	22	-	
	800	11	17	-	
Return Loss(Coupled)	1	18	24	-	dB
	400	14	19	-	
	800	11	15	-	
Input Power <sup>2</sup>	1-10	-	-	0.5	W
	10-800	-	-	1.0	

1. Mainline loss includes theoretical power loss at coupled port.
2. Over -40 to 85 deg C

### TYPICAL PERFORMANCE CURVES

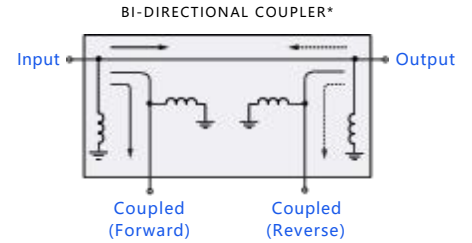


### MAXIMUM RATINGS

Parameter	Rating
Operating temperature	-40°C-85°C
Storage temperature	-50°C-100°C

Permanent damage may occur if any of these limits are exceeded.

### ELECTRICAL SCHEMATIC

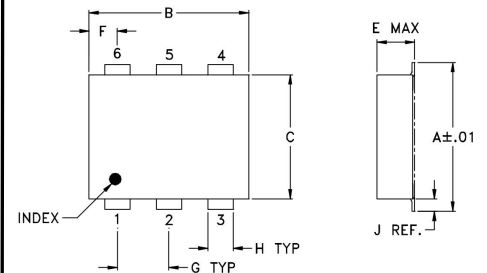


\*Electrical schematic is for Bi-Directional coupler with internal transformer(s) that routes DC from all ports to ground

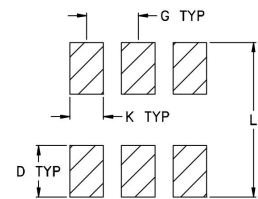
### PIN CONNECTIONS

RF INPUT	1
RF OUTPUT	6
COUPLED (FORWARD) RF	3
COUPLED (REVERSE) RF	4
GROUND	2, 5

### OUTLINE DRAWING



### PBC Land Pattern



### Suggested Layout.

### OUTLINE DIMENSIONS, Unit(mm)

A	6.91	G	2.54
B	7.87	H	0.76
C	5.59	L	0.66
D	2.54	K	1.65
E	4.11	L	7.62
F	1.4		
WT	0.25G		