

TZB Series High Performance Passive 10-Tap Delay Modules

- Fast Rise Time, Low DCR
- High Bandwidth $\approx 0.35 / t_r$
- Low Distortion LC Network
- 10 Equal Delay Taps
- Standard Impedances: 50 - 75 - 100 - 200 Ω
- Stable Delay vs. Temperature: 100 ppm/ $^{\circ}C$
- Operating Temperature Range $-55^{\circ}C$ to $+125^{\circ}C$

Part Number Description

14-Pin 10-Tap Delay Line

Pin Out (Z, Y, U)

Family Code No. (See Table for Delay)

Line Impedance, Z_o (Ohms, $\pm 5\%$)

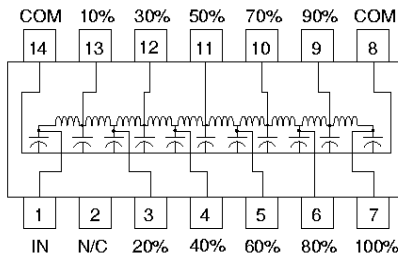
5 = 50 Ω , 7 = 75 Ω , 10 = 100 Ω , 20 = 200 Ω

Examples: TZB72-5 = Z Style 150ns (15ns per tap) 50 Ω

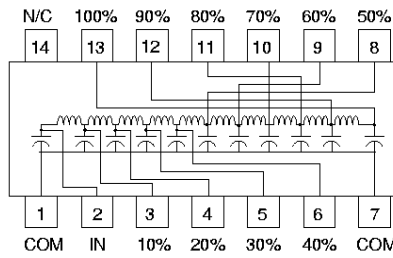
TUB18-10 = U Style 25ns (2.5ns per tap) 100 Ω

T X B XX - XX

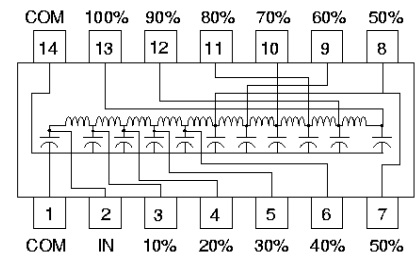
TZB Style Schematic
Most Popular Footprint



TYB Style Schematic
Substitute TYB for TZB in P/N



TUB Style Schematic
Substitute TUB for TZB in P/N

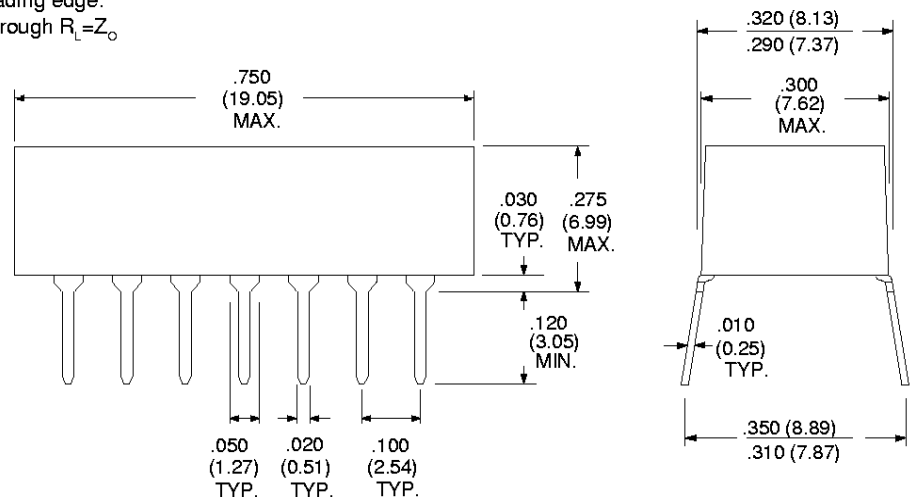


Electrical Specifications at 25 $^{\circ}C$

Delay Tolerances		50 Ohm Part Number	Rise Time (ns)	DCR max. (Ohms)	75 Ohm Part Number		Rise Time (ns)	DCR max. (Ohms)	100 Ohm Part Number		Rise Time (ns)	DCR max. (Ohms)	200 Ohm Part Number		Rise Time (ns)	DCR max. (Ohms)
Total (ns)	Tap-to-Tap (ns)															
5 \pm 0.5	0.5 \pm 0.2	TZB1-5	2.0	0.7	TZB1-7	2.1	0.8	TZB1-10	2.2	0.8	TZB1-20	2.4	0.9			
10 \pm 0.7	1.0 \pm 0.4	TZB6-5	3.2	0.7	TZB6-7	3.6	0.8	TZB6-10	3.8	0.8	TZB6-20	5.5	1.0			
20 \pm 1.0	2.0 \pm 0.5	TZB12-5	4.0	0.7	TZB12-7	4.4	1.3	TZB12-10	4.6	1.5	TZB12-20	8.5	1.5			
25 \pm 1.25	2.5 \pm 0.5	TZB18-5	4.5	0.9	TZB18-7	5.3	1.5	TZB18-10	5.5	1.7	TZB18-20	9.0	1.8			
30 \pm 1.5	3.0 \pm 0.5	TZB24-5	5.5	1.0	TZB24-7	5.8	1.7	TZB24-10	5.8	2.0	TZB24-20	10.0	2.0			
40 \pm 2.0	4.0 \pm 1.0	TZB30-5	7.0	1.2	TZB30-7	7.5	2.0	TZB30-10	7.5	2.2	TZB30-20	13.0	2.2			
50 \pm 2.5	5.0 \pm 1.0	TZB36-5	8.5	1.3	TZB36-7	8.5	2.1	TZB36-10	8.5	2.3	TZB36-20	15.5	2.4			
60 \pm 3.0	6.0 \pm 1.5	TZB42-5	10.5	1.6	TZB42-7	11.4	2.3	TZB42-10	11.5	2.5	TZB42-20	16.0	2.5			
70 \pm 3.5	7.0 \pm 1.5	TZB48-5	11.0	1.7	TZB48-7	13.0	2.5	TZB48-10	13.0	2.8	TZB48-20	17.0	2.5			
80 \pm 4.0	8.0 \pm 1.8	TZB54-5	12.0	1.9	TZB54-7	15.3	3.8	TZB54-10	15.5	3.0	TZB54-20	19.0	2.5			
90 \pm 4.5	9.0 \pm 2.0	TZB60-5	14.0	2.0	TZB60-7	17.3	3.0	TZB60-10	17.5	3.1	TZB60-20	20.0	2.5			
100 \pm 5.0	10.0 \pm 2.0	TZB66-5	18.0	2.1	TZB66-7	19.5	3.1	TZB66-10	20.0	3.2	TZB66-20	24.0	2.5			
150 \pm 7.50	15.0 \pm 3.0	TZB72-5	24.0	2.2	TZB72-7	26.0	3.3	TZB72-10	26.0	3.5	TZB72-20	35.0	3.6			
200 \pm 10.0	20.0 \pm 3.0	TZB78-5	34.0	2.4	TZB78-7	38.0	3.4	TZB78-10	39.0	3.5	TZB78-20	44.0	4.8			
250 \pm 12.5	25.0 \pm 3.0	TZB84-5	41.0	2.4	TZB84-7	45.0	3.5	TZB84-10	46.0	4.0	TZB84-20	56.0	5.2			
300 \pm 15.0	30.0 \pm 3.0	TZB90-5	48.0	2.5	TZB90-7	53.0	3.5	TZB90-10	54.0	4.2	TZB90-20	68.0	5.8			
400 \pm 20.0	40.0 \pm 5.0	TZB94-5	65.0	2.8	TZB94-7	66.0	3.6	TZB94-10	67.0	4.5	---	---	---			
500 \pm 25.0	50.0 \pm 5.0	TZB98-5	75.0	3.3	TZB98-7	84.0	3.7	TZB98-10	86.0	5.0	---	---	---			

1. Rise Times are measured from 10% to 90% points.
2. Delay Times measured at 50% points of leading edge.
3. Output (100% Tap) terminated to ground through $R_L = Z_o$.

Dimensions in inches (mm)



Specifications subject to change without notice.

For other values & Custom Designs, contact factory.

TZB_TZA 5/98