

# SIL2 Series Mini-SIP Passive Delay Modules

- Fast Rise Time, Low DCR
- High Bandwidth  $\approx 0.35 / t_r$
- Low Distortion LC Network
- Tight Delay Tolerance
- Standard Impedances: 50 to 200  $\Omega$
- Stable Delay vs. Temperature: 100 ppm/°C
- Operating Temperature Range -55°C to +125°C

## Operating Specifications - Passive Delay Lines

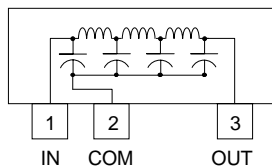
Pulse Overshoot (Pos)	5% to 10%, typical
Pulse Distortion (S)	3% typical
Working Voltage	25 VDC maximum
Dielectric Strength	100VDC minimum
Insulation Resistance	1,000 M $\Omega$ min. @ 100VDC
Temperature Coefficient	100 ppm/°C, typical
Bandwidth ( $f_c$ )	0.35/ $t_r$ approx.
Operating Temperature Range	-55° to +125°C
Storage Temperature Range	-65° to +150°C

## Electrical Specifications at 25°C

Delay (ns)	Rise Time max. (ns)	DCR max. (Ohms)	50 Ohm Impedance Part Number	55 Ohm Impedance Part Number	60 Ohm Impedance Part Number	75 Ohm Impedance Part Number	93 Ohm Impedance Part Number	100 Ohm Impedance Part Number	200 Ohm Impedance Part Number
0.0	—	.10	SIL2-0	SIL2-0	SIL2-0	SIL2-0	SIL2-0	SIL2-0	SIL2-0
1.0 $\pm$ .20	1.6	.20	SIL2-1-50	SIL2-1-55	SIL2-1-60	SIL2-1-75	SIL2-1-93	SIL2-1-10	SIL2-1-20
1.5 $\pm$ .20	1.6	.30	SIL2-1.5-50	SIL2-1.5-55	SIL2-1.5-60	SIL2-1.5-75	SIL2-1.5-93	SIL2-1.5-10	SIL2-1.5-20
2.0 $\pm$ .20	1.6	.40	SIL2-2-50	SIL2-2-55	SIL2-2-60	SIL2-2-75	SIL2-2-93	SIL2-2-10	SIL2-2-20
2.5 $\pm$ .20	1.6	.50	SIL2-2.5-50	SIL2-2.5-55	SIL2-2.5-60	SIL2-2.5-75	SIL2-2.5-93	SIL2-2.5-10	SIL2-2.5-20
3.0 $\pm$ .20	1.7	.60	SIL2-3-50	SIL2-3-55	SIL2-3-60	SIL2-3-75	SIL2-3-93	SIL2-3-10	SIL2-3-20
4.0 $\pm$ .20	1.7	.70	SIL2-4-50	SIL2-4-55	SIL2-4-60	SIL2-4-75	SIL2-4-93	SIL2-4-10	SIL2-4-20
5.0 $\pm$ .25	1.8	.80	SIL2-5-50	SIL2-5-55	SIL2-5-60	SIL2-5-75	SIL2-5-93	SIL2-5-10	SIL2-5-20
6.0 $\pm$ .30	2.0	.85	SIL2-6-50	SIL2-6-55	SIL2-6-60	SIL2-6-75	SIL2-6-93	SIL2-6-10	SIL2-6-20
7.0 $\pm$ .30	2.3	.90	SIL2-7-50	SIL2-7-55	SIL2-7-60	SIL2-7-75	SIL2-7-93	SIL2-7-10	SIL2-7-20
8.0 $\pm$ .30	2.7	.95	SIL2-8-50	SIL2-8-55	SIL2-8-60	SIL2-8-75	SIL2-8-93	SIL2-8-10	SIL2-8-20
9.0 $\pm$ .30	2.9	1.10	SIL2-9-50	SIL2-9-55	SIL2-9-60	SIL2-9-75	SIL2-9-93	SIL2-9-10	SIL2-9-20
10 $\pm$ .30	3.3	1.20	SIL2-10-50	SIL2-10-55	SIL2-10-60	SIL2-10-75	SIL2-10-93	SIL2-10-10	SIL2-10-20
11 $\pm$ .40	3.8	1.40	SIL2-11-50	SIL2-11-55	SIL2-11-60	SIL2-11-75	SIL2-11-93	SIL2-11-10	SIL2-11-20
12 $\pm$ .50	4.1	1.50	SIL2-12-50	SIL2-12-55	SIL2-12-60	SIL2-12-75	SIL2-12-93	SIL2-12-10	SIL2-12-20
13 $\pm$ .60	4.6	1.60	SIL2-13-50	SIL2-13-55	SIL2-13-60	SIL2-13-75	SIL2-13-93	SIL2-13-10	SIL2-13-20
14 $\pm$ .70	4.9	1.60	SIL2-14-50	SIL2-14-55	SIL2-14-60	SIL2-14-75	SIL2-14-93	SIL2-14-10	SIL2-14-20
15 $\pm$ .70	5.3	1.70	SIL2-15-50	SIL2-15-55	SIL2-15-60	SIL2-15-75	SIL2-15-93	SIL2-15-10	SIL2-15-20
16 $\pm$ .80	5.6	1.70	SIL2-16-50	SIL2-16-55	SIL2-16-60	SIL2-16-75	SIL2-16-93	SIL2-16-10	SIL2-16-20
20 $\pm$ 1.0	7.0	2.00	SIL2-20-50	SIL2-20-55	SIL2-20-60	SIL2-20-75	SIL2-20-93	SIL2-20-10	SIL2-20-20

1. Rise Times are measured from 20% to 80% points.
2. Delay Times measured at 50% points of leading edge.
3. Output terminated to ground through  $R_L = Z_0$

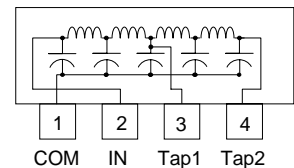
### SIL2 Single Output Schematic



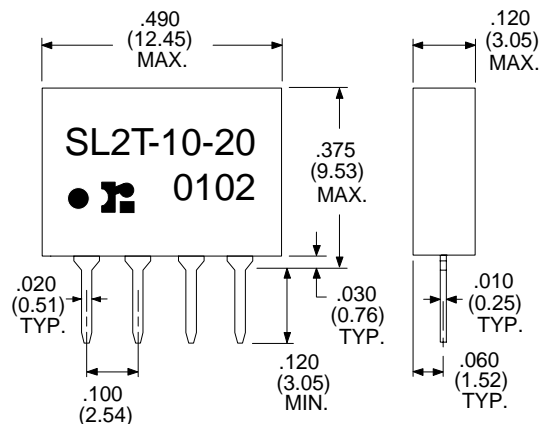
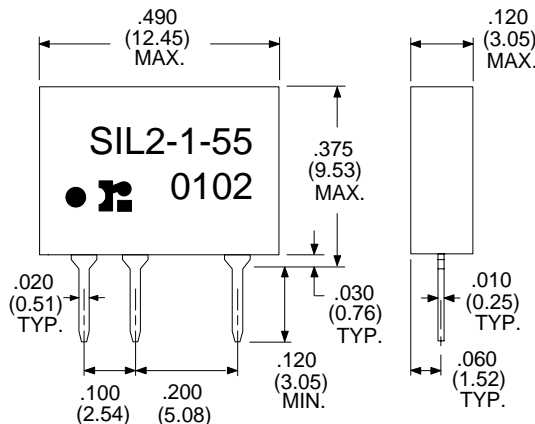
### "SL2T" Part Number Examples:

- SL2T2-50  
2 ns (1ns Tap) 50  $\Omega$
- SL2T1.5-55  
2.5 ns (1.25ns Tap) 55  $\Omega$
- SL2T12-10  
12 ns (6ns Tap) 100  $\Omega$

### SL2T 2-tap Schematic



### Dimensions in inches (mm)



Specifications subject to change without notice.

For other values & Custom Designs, contact factory.

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