

# PASSIVE SIP DELAY LINES, SINGLE OUTPUT

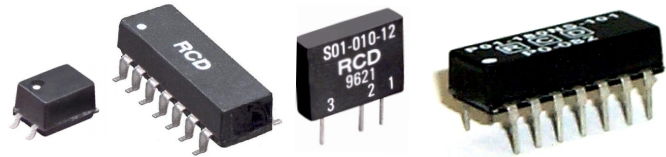


RESISTORS • CAPACITORS • COILS • DELAY LINES

**SMP01S** - 4 PIN SM  
**P01S** - 4 PIN DIP  
**P01** - 14 PIN DIP & SM  
**S01** - 3 PIN SIP



Term.W is RoHS compliant



- Industry's widest range: 0.1nS to 1000nS
- Low cost, prompt delivery!
- Wide range of package styles
- Detailed application handbook available

## OPTIONS

- Custom circuits, delay and/or impedance values
- MIL-D-23859 screening
- Increased operating temperature range
- Low profile package (Type P01 only)
- Tighter tolerance or temperature coefficient
- Faster rise times

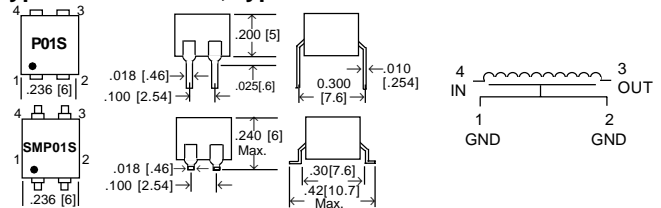
RCD's passive delay lines are a lumped constant design, incorporating high-performance inductors and multilayer capacitors in a molded case ensuring stable transmission, low temperature coefficient, and excellent environmental performance.

Total Delay Tolerance	S01: $\pm 5\%$ or $\pm 0.2\text{nS}$ (whichever is greater) P01: $\pm 5\%$ or $\pm 2\text{nS}$ (whichever is greater) P01S/SMP01S: $\pm 20\%$
Temperature Coefficient	$\pm 100\text{ppm}/^\circ\text{C}$ Max.
Insulation Resistance	1000M $\Omega$ Min.
Dielectric Strength	100VDC
Distortion	$\pm 10\%$ Max.
Operating Temp. Range	0 to 70°C (Opt.39= -40 to 85°C, ER= -55 to 125°C)
Operating Freq. (BW)	BW (MHz)=.35/(Tr nS x 1000)
Attenuation: (dependent on impedance, low values have lower attenuation)	S01: 2% P01: 10nS-300nS 10% , >300nS 20% P01S/SMP01S: 20%

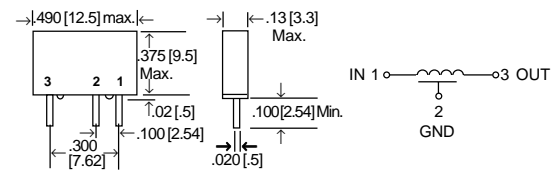
RCD Type	Delay Time, T <sub>D</sub> (nS)	Max. Rise Time, T <sub>R</sub> * (nS)	Available Impedance Values ( $\pm 10\%$ )
P01S & SMP01S	0.1	2.0	50 $\Omega$ or 75 $\Omega$
	0.2	2.0	50 $\Omega$ or 75 $\Omega$
	0.3	2.0	50 $\Omega$ or 75 $\Omega$
	0.4	2.0	50 $\Omega$ or 75 $\Omega$
	0.5	2.0	50 $\Omega$ or 75 $\Omega$
	0.6	2.0	50 $\Omega$ or 75 $\Omega$
	0.7	2.0	50 $\Omega$ or 75 $\Omega$
	0.8	2.0	50 $\Omega$ or 75 $\Omega$
	0.9	2.0	50 $\Omega$ or 75 $\Omega$
	1.0	2.0	50 $\Omega$ or 75 $\Omega$
S01	0.5	1.6	55 $\Omega$ , 93 $\Omega$ or 100 $\Omega$
	1.0	1.6	55 $\Omega$ , 93 $\Omega$ or 100 $\Omega$
	2.0	1.6	55 $\Omega$ , 93 $\Omega$ or 100 $\Omega$
	3.0	1.7	55 $\Omega$ , 93 $\Omega$ or 100 $\Omega$
	4.0	1.7	55 $\Omega$ , 93 $\Omega$ or 100 $\Omega$
	5.0	1.8	55 $\Omega$ , 93 $\Omega$ or 100 $\Omega$
	6.0	2.0	55 $\Omega$ , 93 $\Omega$ or 100 $\Omega$
	7.0	2.2	55 $\Omega$ , 93 $\Omega$ or 100 $\Omega$
	8.0	2.4	55 $\Omega$ , 93 $\Omega$ or 100 $\Omega$
	9.0	2.6	55 $\Omega$ , 93 $\Omega$ or 100 $\Omega$
P01, P01A, P01G, P01AG	10	3.5	100 $\Omega$
	20	5.5	50 $\Omega$ , 100 $\Omega$ , 200 $\Omega$
	30	6.5	50 $\Omega$ , 100 $\Omega$ , 200 $\Omega$
	40	8	50 $\Omega$ , 100 $\Omega$ , 200 $\Omega$ , 300 $\Omega$
	50	10	50 $\Omega$ , 100 $\Omega$ , 200 $\Omega$ , 300 $\Omega$ , 500 $\Omega$
	60	12	50 $\Omega$ , 100 $\Omega$ , 200 $\Omega$ , 300 $\Omega$ , 500 $\Omega$
	75	15	50 $\Omega$ , 100 $\Omega$ , 200 $\Omega$ , 300 $\Omega$ , 500 $\Omega$
	100	20	50 $\Omega$ , 100 $\Omega$ , 200 $\Omega$ , 300 $\Omega$ , 500 $\Omega$
	120	24	50 $\Omega$ , 100 $\Omega$ , 200 $\Omega$ , 300 $\Omega$ , 500 $\Omega$
	150	30	50 $\Omega$ , 100 $\Omega$ , 200 $\Omega$ , 300 $\Omega$ , 500 $\Omega$
180	36	50 $\Omega$ , 100 $\Omega$ , 200 $\Omega$ , 300 $\Omega$ , 500 $\Omega$	
200	40	50 $\Omega$ , 100 $\Omega$ , 200 $\Omega$ , 300 $\Omega$ , 500 $\Omega$	
220	44	50 $\Omega$ , 100 $\Omega$ , 200 $\Omega$ , 300 $\Omega$ , 500 $\Omega$	
250	50	50 $\Omega$ , 100 $\Omega$ , 200 $\Omega$ , 300 $\Omega$ , 500 $\Omega$	
300	60	50 $\Omega$ , 100 $\Omega$ , 200 $\Omega$ , 300 $\Omega$ , 500 $\Omega$	
375	75	50 $\Omega$ , 100 $\Omega$ , 200 $\Omega$ , 300 $\Omega$ , 500 $\Omega$	
500	100	50 $\Omega$ , 100 $\Omega$ , 200 $\Omega$ , 300 $\Omega$ , 500 $\Omega$	
600	120	50 $\Omega$ , 100 $\Omega$ , 200 $\Omega$ , 300 $\Omega$ , 500 $\Omega$	
750	150	50 $\Omega$ , 100 $\Omega$ , 200 $\Omega$ , 300 $\Omega$ , 500 $\Omega$	
1000	200	50 $\Omega$ , 100 $\Omega$ , 200 $\Omega$ , 300 $\Omega$ , 500 $\Omega$	

\* Faster rise times available on some models

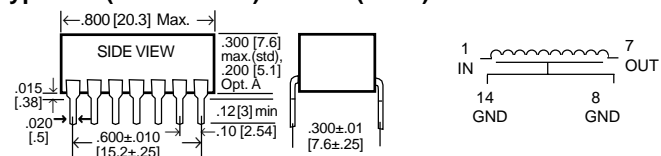
## Type P01S 4-Pin DIP, Type SMP01S 4-Pin Surface Mount



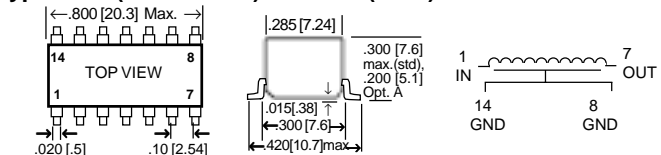
## Type S01 3-Pin SIP



## Type P01 (.300" Profile) & P01A (.200") 14-Pin DIP



## Type P01G (.300" Profile) & P01AG (.200") 14-Pin Surface Mount



**TEST CONDITIONS:** Pulse width at 3x total delay, pulse input at 2.5V, delay measured at 25°C on leading edge with no loads on output. Rise time measured at 10% to 90% points.

## P/N DESIGNATION:

