

PASSIVE SIP DELAY LINES, SINGLE OUTPUT

SMP01S - 4 PIN SM

P01S - 4 PIN DIP

P01 - 14 PIN DIP & SM

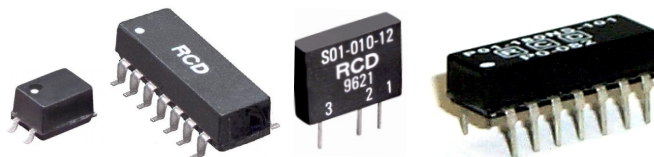
S01 - 3 PIN SIP



Term.W is
RoHS
compliant



RESISTORS • CAPACITORS • COILS • DELAY LINES



- 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

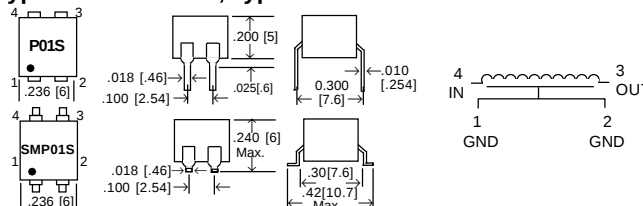
RCD's passive delay lines are a lumped constant design, incorporating high-performance inductors and multilayer capacitors in a molded case ensuring stable transmission, low temperature coefficient, and excellent environmental performance.

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 Ω 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%

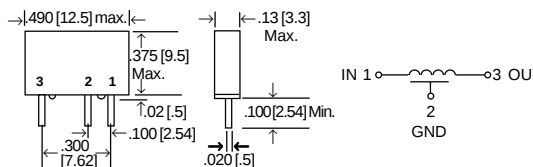
RCD Type	Delay Time, T _D (nS)	Max. Rise Time, T _R * (nS)	Available Impedance Values ($\pm 10\%$)
P01S & SMP01S	0.1	2.0	50 Ω or 75 Ω
	0.2	2.0	50 Ω or 75 Ω
	0.3	2.0	50 Ω or 75 Ω
	0.4	2.0	50 Ω or 75 Ω
	0.5	2.0	50 Ω or 75 Ω
	0.6	2.0	50 Ω or 75 Ω
	0.7	2.0	50 Ω or 75 Ω
	0.8	2.0	50 Ω or 75 Ω
	0.9	2.0	50 Ω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

* Faster rise times available on some models

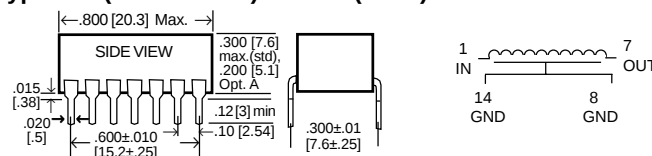
Type P01S 4-Pin DIP, Type SMP01S 4-Pin Surface Mount



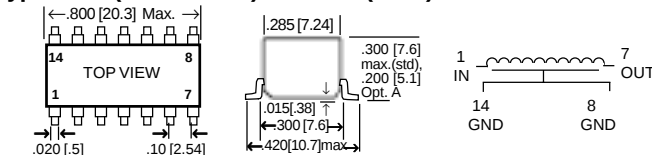
Type S01 3-Pin SIP



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:

RCD Type _____ **P01** **- 10NS - 101 B W**

Options: as assigned by RCD (leave blank if std.)

Delay Time (0.1NS, 1NS, 10NS, 100NS, 1000NS, etc)

Impedance: 50R=50 Ω , 75R=75 Ω , 101=100 Ω , 201=200 Ω , 301=300 Ω , 501=500 Ω

Packaging: B=Bulk (magazine tube is standard)

Termination: W= Lead-free, Q= Tin/Lead (leave blank if either is acceptable)