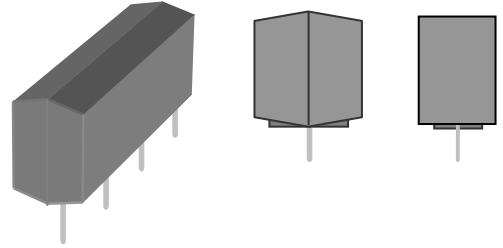


# Single-In-Line (SIP) Reed Relays

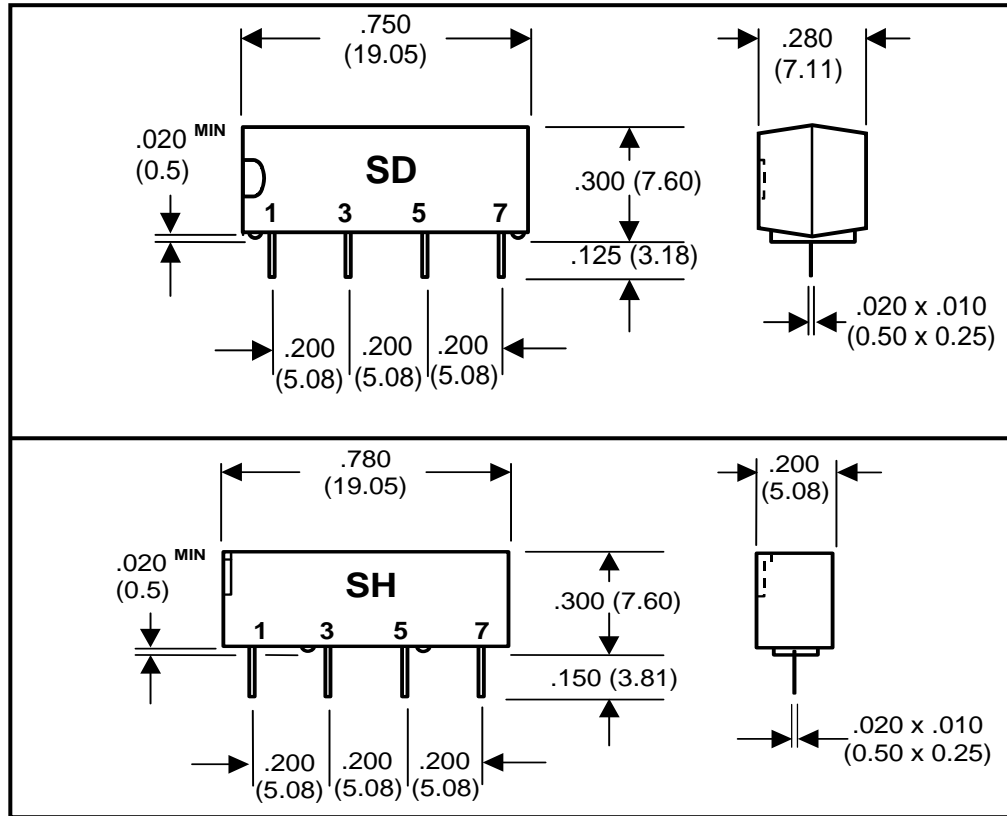
## "SD" and "SH" series

- Epoxy molded sub-miniature Single-In-Line Package high quality reed relays.
- Automatic insertion compatible.
- "SH" series is the smallest SIP package reed relay and designed for high reliable automatic test equipment.



**.2x.2x.2 SIP**

### OUTLINE DIMENSIONS



Inches/mm

### CONTACT RATINGS AND OPERATING CHARACTERISTICS (@25°C)

Characteristics	Form A/B (DRY), SD	Form A (DRY), SH	Form A (MERCURY), SD ONLY
<b>Contact Ratings</b>			
Power (Resistive Load) (Max.)	10 Watts	10 Watts	50 Watts
Switching Voltage (Max.)	150 VDC	100 VDC	500 VDC
Switching Current (Max.)	0.5 Amps	0.5 Amps	1.0 Amps
<b>Contact Resistance (Max. Initial)</b>	0.2 Ohms	0.2 Ohms	0.07 Ohms
<b>Operating Time (Max.)</b>	0.5 mSec	0.3 mSec	2.0 mSec
<b>Release Time (Max.)</b>	0.5 mSec	0.1 mSec	2.0 mSec
<b>Bounce Time (Max.)</b>	0.5 mSec	0.2 mSec	NONE
<b>Insulation Resistance (Min.)</b>	10 <sup>10</sup> Ohms	10 <sup>11</sup> Ohms	10 <sup>10</sup> Ohms
<b>Breakdown Voltage (Min.)</b> (Across contacts) (Contact to coil)	250 VDC 1500 VDC	200 VDC 1500 VDC	1000 VDC 1500 VDC
<b>Life Expectancy:</b> (Low level) (Rated load)	100 x 10 <sup>6</sup> Operations 5 x 10 <sup>6</sup> Operations	100 x 10 <sup>6</sup> Operations 5 x 10 <sup>6</sup> Operations	1 x 10 <sup>9</sup> Operations 50 x 10 <sup>6</sup> Operations

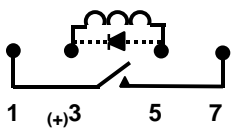
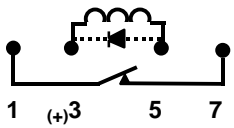
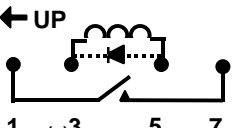
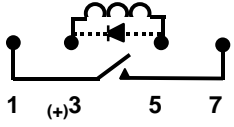
American Relays, Inc. (562) 926-2837, Fax (562) 926-2703, E-mail: Sales@americanrelays.com

## SERIES “SD” AND “SH” SINGLE-IN-LINE REED RELAYS

### ENVIRONMENTAL RATINGS (Operating)

	SD & SH (DRY)	SD (MERCURY WETTED)
Temperature	-40°C to +85°C	-30°C to +85°C
Vibration	20G, 10 to 2000 Hz	5G to, 10 to 500 Hz (non-operating)
Shock	50G @ 11mS Duration	30G @ 11mS Duration (non-operating)

### PART NUMBERS AND COIL DATA (@ 25°C)

	Contact Form	Part Number (No Diode)	Part Number (With Diode)	Nom. Volt VDC	Max. Volt VDC	Coil Res. Ohms +/-10%	Must Operate VDC	Must Release VDC	Schematic Top-view
SD	1A	SD1A05	SD1A05D	5	7.5	500	3.8	0.5	
		SD1A12	SD1A12D	12	18	850	8.0	1.0	
		SD1A24	SD1A24D	24	36	2200	16.0	2.0	
	1B	SD1B05	SD1B05D	5	7.5	500	3.8	0.5	
		SD1B12	SD1B12D	12	18	500	8.0	1.0	
		SD1B24	SD1B24D	24	36	1750	16.0	2.0	
	1A Mercury	SD1A05HG	SD1A05HGD	5	7.5	160	4.0	0.5	
		SE1A12HG	SE1A12HGD	12	18	500	9.0	1.0	
		SE1A24HG	SE1A24HGD	24	36	1440	18.0	2.0	
SH	1A	SH1A05	SH1A05D	5	7.5	500	3.8	0.5	
		SH1A12	SH1A12D	12	18	1000 or 1500	8.0	1.0	
		SH1A24	SH1A24D	24	36	1400 or 2000	16.0	2.0	

#### Note:

- Mercury wetted relays should be mounted within +/-30° from vertical position.