

# Grayhill **DIP Switches**



Grayhill's unique spring and ball contact design offers unparalleled reliability compared to conventional wiping contact designs. When actuated the ball rests between two contacts allowing multiple points of contact while the spring compression is at maximum pressure. Temperature, humidity and vibration have minimal affect on this design.

**Specifications:** • Mechanical Life per switch position: 76/78 – 20,000; 90B – 5,000 • Contact Resistance: Initially ≤ 30mΩ • Insulation Resistance: 5,000MΩ • Dielectric Strength: 750V • Current Carry: 3A • Switch Capacitance: 2pF • Operating Temperature: -40°C – 85°C • SMT Processing Temperature (90HBW, 90HBJ): 260°C Maximum

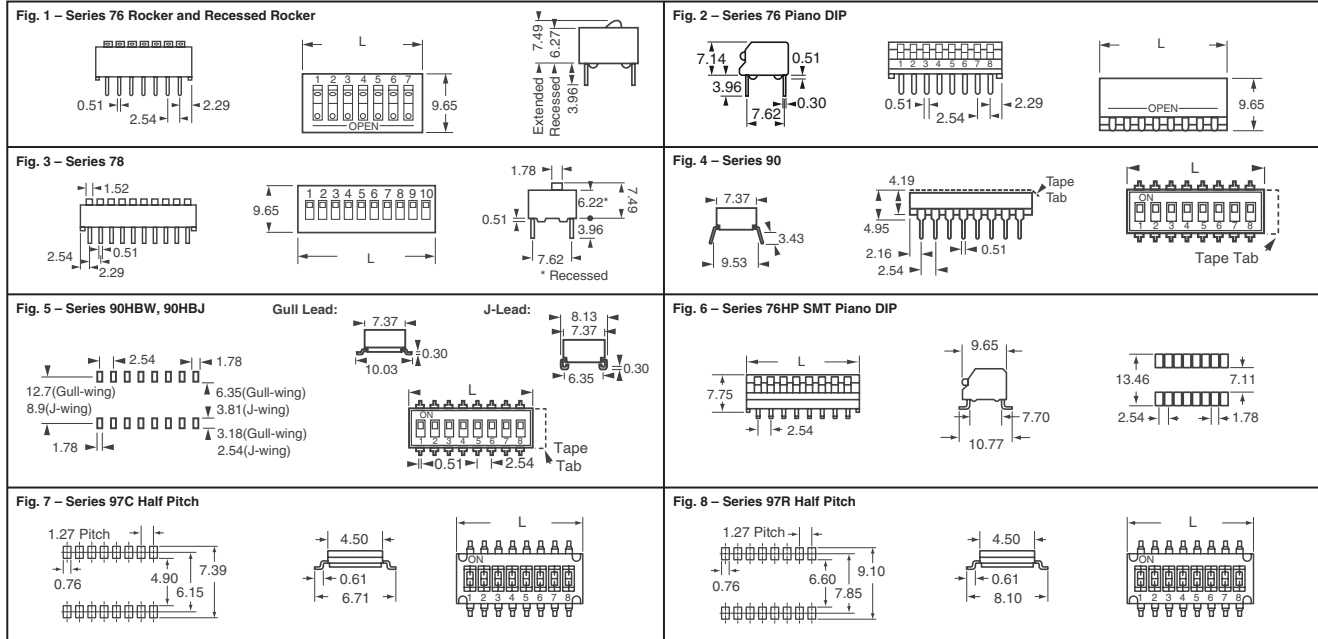


Fig.	No. of Pos.	Dim. L (mm)	Digi-Key Part No.	Price Each	Grayhill Part No.
Raised Rocker, Unsealed					
1	2	7.11	GH7115-ND	1.07 .99 .90	76SB02T
1	3	9.65	GH7168-ND	1.08 1.00 .91	76SB03T
1	4	12.19	GH7170-ND	1.07 .99 .90	76SB04T
1	5	14.7	GH7172-ND	1.56 1.44 1.31	76SB05T
1	6	17.27	GH7174-ND	1.57 1.45 1.32	76SB06T
1	7	19.81	GH7175-ND	1.62 1.49 1.36	76SB07T
1	8	22.35	GH7177-ND	1.64 1.50 1.37	76SB08T
1	9	24.89	GH7179-ND	1.68 1.55 1.41	76SB09T
1	10	27.43	GH7181-ND	1.73 1.59 1.44	76SB10T
1	12	32.51	GH7120-ND	1.90 1.74 1.58	76SB12T
Raised Rocker, Sealed					
1	2	7.11	GH7114-ND	1.23 1.14 1.04	76RSB02ST
1	3	9.65	GH7167-ND	1.23 1.14 1.04	76RSB03ST
1	4	12.2	GH7169-ND	1.23 1.14 1.04	76RSB04ST
1	5	14.73	GH7171-ND	1.72 1.58 1.44	76RSB05ST
1	6	17.27	GH7173-ND	1.68 1.55 1.41	76RSB06ST
1	7	19.81	GH7116-ND	1.69 1.56 1.42	76RSB07ST
1	8	22.35	GH7176-ND	1.69 1.56 1.42	76RSB08ST
1	9	24.89	GH7178-ND	1.78 1.64 1.49	76RSB09ST
1	10	27.43	GH7117-ND	1.83 1.68 1.53	76RSB10ST
1	12	32.51	GH7119-ND	1.98 1.81 1.65	76RSB12ST
Recessed Rocker, Unsealed					
1	2	7.11	GH7150-ND	3.10 2.17 1.43	76RSB02T
1	3	9.65	GH7152-ND	3.18 2.23 1.47	76RSB03T
1	4	12.19	GH7154-ND	3.30 2.31 1.52	76RSB04T
1	5	14.73	GH7156-ND	3.43 2.41 1.58	76RSB05T
1	6	17.27	GH7158-ND	3.50 2.45 1.61	76RSB06T
1	7	19.81	GH7162-ND	3.70 2.60 1.71	76RSB08T
1	8	22.35	GH7164-ND	3.77 2.64 1.74	76RSB09T
1	10	27.43	GH7165-ND	3.79 2.66 1.75	76RSB10T
1	12	32.51	GH7166-ND	4.04 2.83 1.86	76RSB12T
Recessed Rocker, Sealed					
1	2	7.11	GH7149-ND	3.30 2.31 1.52	76RSB02ST
1	3	9.65	GH7151-ND	3.43 2.41 1.58	76RSB03ST
1	4	12.19	GH7153-ND	3.50 2.45 1.61	76RSB04ST
1	5	14.73	GH7155-ND	3.64 2.55 1.68	76RSB05ST
1	6	17.27	GH7157-ND	3.70 2.60 1.71	76RSB06ST
1	7	19.81	GH7159-ND	3.77 2.64 1.74	76RSB07ST
1	8	22.35	GH7161-ND	3.86 2.71 1.78	76RSB08ST
1	9	24.89	GH7163-ND	3.96 2.78 1.83	76RSB09ST
1	10	27.43	GH7112-ND	4.04 2.83 1.86	76RSB10ST
1	12	32.51	GH7113-ND	4.23 2.96 1.95	76RSB12ST
PIANO DIP® Unsealed					
2	2	7.11	GH7132-ND	1.51 1.39 1.27	76PSB02T
2	3	9.7	GH7134-ND	1.56 1.44 1.31	76PSB03T
2	4	12.19	GH7136-ND	1.26 1.16 1.06	76PSB04T
2	5	14.73	GH7138-ND	1.62 1.49 1.36	76PSB05T
2	6	17.27	GH7140-ND	1.43 1.31 1.19	76PSB06T
2	7	19.81	GH7142-ND	1.62 1.49 1.36	76PSB07T
2	8	22.4	GH7144-ND	1.48 1.37 1.24	76PSB08T
2	9	24.89	GH7146-ND	1.82 1.67 1.52	76PSB09T
2	10	27.43	GH7148-ND	1.51 1.39 1.27	76PSB10T
2	12	32.51	GH7111-ND	2.15 1.98 1.80	76PSB12T

Fig.	No. of Pos.	Dim. L (mm)	Digi-Key Part No.	Price Each	Grayhill Part No.
PIANO DIP® Sealed					
2	2	7.11	GH7131-ND	1.64 1.50 1.37	76PSB02ST
2	3	9.65	GH7133-ND	1.68 1.55 1.41	76PSB03ST
2	4	12.19	GH7135-ND	1.37 1.25 1.14	76PSB04ST
2	5	14.7	GH7137-ND	1.72 1.58 1.44	76PSB05ST
2	6	17.27	GH7139-ND	1.55 1.42 1.29	76PSB06ST
2	7	19.8	GH7141-ND	1.89 1.73 1.58	76PSB07ST
2	8	22.35	GH7143-ND	1.64 1.50 1.37	76PSB08ST
2	9	24.89	GH7145-ND	2.01 1.85 1.68	76PSB09ST
2	10	27.43	GH7147-ND	1.73 1.59 1.44	76PSB10ST
2	12	32.51	GH7110-ND	2.26 2.07 1.89	76PSB12ST
Raised Slide Switch, Unsealed					
3	2	7.11	GH7181-ND	1.25 1.14 1.04	78B02T
3	3	9.7	GH7183-ND	1.25 1.15 1.05	78B03T
3	4	12.19	GH7185-ND	1.04 .96 .87	78B04T
3	5	14.73	GH7187-ND	1.27 1.17 1.07	78B05T
3	6	17.27	GH7189-ND	1.27 1.17 1.07	78B06T
3	7	19.81	GH7191-ND	1.27 1.17 1.07	78B07T
3	8	22.4	GH7193-ND	1.17 1.07 .98	78B08T
3	9	24.89	GH7122-ND	1.25 1.14 1.04	78B09T
3	10	27.4	GH7195-ND	1.27 1.17 1.07	78B10T
3	12	32.51	GH7197-ND	1.48 1.37 1.24	78B12T
Raised Slide Switch, Sealed					
3	2	7.11	GH7180-ND	1.26 1.16 1.05	78B02ST
3	3	9.65	GH7182-ND	1.27 1.16 1.06	78B03ST
3	4	12.19	GH7184-ND	1.10 1.02 .92	78B04ST
3	5	14.7	GH7186-ND	1.53 1.40 1.28	78B05ST
3	6	17.27	GH7188-ND	1.46 1.34 1.22	78B06ST
3	7	19.81	GH7190-ND	1.49 1.37 1.25	78B07ST
3	8	22.4	GH7192-ND	1.25 1.14 1.04	78B08ST
3	9	24.89	GH7121-ND	1.37 1.25 1.14	78B09ST
3	10	27.43	GH7194-ND	1.48 1.37 1.24	78B10ST
3	12	32.51	GH7196-ND	1.73 1.59 1.44	78B12ST
Recessed Slide Switch, Unsealed					
3	2	7.11	GH7201-ND	1.25 1.14 1.04	78R02T
3	3	9.7	GH7203-ND	1.25 1.15 1.05	78R03T
3	4	12.2	GH7205-ND	1.04 .96 .87	78R04T
3	5	14.73	GH7207-ND	1.27 1.17 1.07	78R05T
3	6	17.3	GH7209-ND	1.26 1.16 1.06	78R06T
3	7	19.81	GH7211-ND	1.27 1.17 1.07	78R07T
3	8	22.35	GH7213-ND	1.17 1.07 .98	78R08T
3	9	24.89	GH7124-ND	1.25 1.14 1.04	78R09T
3	10	27.43	GH7215-ND	1.27 1.17 1.07	78R10T
3	12	32.51	GH7216-ND	1.48 1.37 1.24	78R12T
Recessed Slide Switch, Sealed					
3	2	7.11	GH7200-ND	1.25 1.14 1.04	78R02ST
3	3	9.65	GH7202-ND	1.25 1.15 1.05	78R03ST
3	4	12.19	GH7204-ND	1.10 1.02 .92	78R04ST
3	5	14.73	GH7206-ND	1.53 1.40 1.28	78R05ST
3	6	17.3	GH7208-ND	1.46 1.34 1.22	78R06ST
3	7	19.81	GH7210-ND	1.49 1.37 1.25	78R07ST
3	8	22.35	GH7212-ND	1.25 1.14 1.04	78R08ST
3	9	24.89	GH7123-ND	1.37 1.25 1.14	78R09ST
3	10	27.43	GH7214-ND	1.48 1.37 1.24	78R10ST

Fig.	No. of Pos.	Dim. L (mm)	Digi-Key Part No.	Price Each	Grayhill Part No.
Auto-Insertable Auto DIP, Sealed					
4	2	6.86	GH7218-ND	.89 .81 .74	90B02ST
4	3	9.40	GH7219-ND	.99 .91 .83	90B03ST
4	4	11.9	GH7220-ND	1.08 1.00 .91	90B04ST
4	5	14.5	GH7221-ND	1.16 1.06 .96	90B05ST
4	6	17.02	GH7222-ND	1.37 1.25 1.14	90B06ST
4	7	19.6	GH7223-ND	1.44 1.32 1.20	90B07ST
4	8	22.10	GH7224-ND	1.34 1.23 1.12	90B08ST
4	9	24.64	GH7225-ND	1.68 1.55 1.41	90B09ST
4	10	27.18	GH7226-ND	1.80 1.65 1.50	90B10ST
SMT Gull Lead, Sealed					
5	2	6.9	GH7236-ND	.99 .91 .83	90HBW02PT
5	3	9.4	GH7237-ND	1.03 .95 .86	90HBW03PT
5	4	11.9	GH7238-ND	1.14 1.05 .96	90HBW04PT
5	5	14.5	GH7239-ND	1.28 1.18 1.07	90HBW05PT
5	6	17.0	GH7240-ND	1.34 1.23 1.12	90HBW06PT
5	7	19.6	GH7241-ND	1.47 1.35 1.23	90HBW07PT
5	8	22.1	GH7242-ND	1.37 1.25 1.14	90HBW08PT
5	9	24.6	GH7243-ND	1.72 1.58 1.44	90HBW09PT
5	10	27.2	GH7244-ND	1.73 1.59 1.44	90HBW10PT
SMT J-Lead, Sealed					
5	2	6.86	GH7227-ND	1.94 1.78 1.62	90HBJ02PT
5	3	9.40	GH7228-ND	2.00 1.84 1.67	90HBJ03PT
5	4	11.94	GH7229-ND	1.69 1.56 1.42	90HBJ04PT
5	5	14.48	GH7230-ND	1.94 1.78 1.62	90HBJ05PT
5	6	17.02	GH7231-ND	1.98 1.81 1.65	90HBJ06PT
5	7	19.56	GH7232-ND	2.03 1.87 1.70	90HBJ07PT
5	8	22.10	GH7233-ND	1.69 1.56 1.42	90HBJ08PT
5	10	27.20	GH7235-ND	1.91 1.75 1.60	90HBJ10PT
Series 76HP PIANO DIP®					
6	2	7.1	GH7125CT-ND	4.51 3.16 2.08	76HPSB02GWRT
6	2	7.1	GH7125TR-ND	907.27/500	76HPSB02GWRT
6	4	12.2	GH7126CT-ND	4.65 3.26 2.14	76HPSB04GWRT
6	4	12.2	GH7126TR-ND	934.76/500	76HPSB04GWRT
6	6	17.3	GH7127CT-ND	4.90 3.44 2.26	76HPSB06GWRT
6	6	17.3	GH7127TR-ND	987.78/500	76HPSB06GWRT
6	8	22.4	GH7128CT-ND	5.25 3.68 2.42	76HPSB08GWRT
6	8	22.4	GH7128TR-ND	1057.50/500	76HPSB08GWRT
6	10	27.4	GH7109TR-ND	1151.76/500	76HPSB10GWRT
Series 97 Half Pitch					
7	2	3.76	GH1370-ND	4.92 3.44 2.26	97C02ST
7	4	6.30	GH1371-ND	5.05 3.54 2.33	97C04ST
7	8	11.38	GH1372-ND	5.31 3.72 2.45	97C08ST
7	10	13.92	GH1373-ND	5.72 4.01 2.64	97C10ST
8	2	3.76	GH1374-ND	4.92 3.44 2.26	97R02ST
8	4	6.30	GH1375-ND	5.05 3.54 2.33	97R04ST
8	8	11.38	GH1376-ND	5.31 3.72 2.45	97R08ST
Hand Tool for Dip Switch					
---	Tool	---	GH1343-ND	1.81	84 90-DIPSTICK

Digi-Reel® Most SMT cutdown parts are available on a Digi-Reel®. For Digi-Reel part number, change 1-ND to 6-ND or CT-ND to DKR-ND. See Digi-Key® Services on page 2 for additional information.

Free shipping on orders over \$200 CAD! All prices in Canadian dollars and include duty and brokerage fees.

2358 (CA2011)

1-800-344-4539 • www.digikey.ca • 218-681-6674 • Fax: 218-681-3380