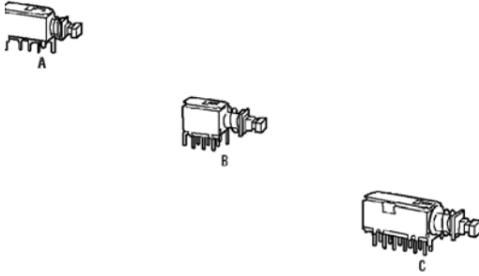


**PN Series  
Alternate Action Pushbutton Switches**

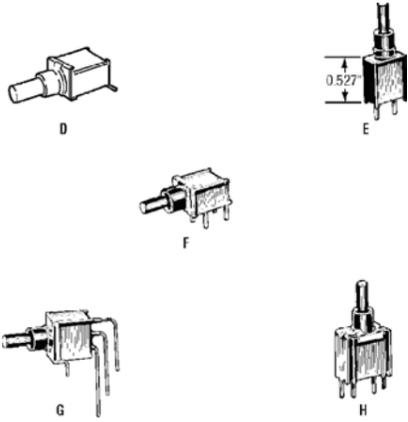


**Contact Rating:** 0.2 amps @ 30 VDC max. **Electrical Life:** 10,000 make-and-break cycles at full load. **Mechanical Life:** 10,000 on/off cycles. **Operating Temperature:** -10°C to +60°C. **Actuator:** Polyacetal. **Movable Contacts:** Silver-plated (or clad) phosphor bronze. **Terminals:** Silver-plated brass, epoxy seal.

Stock No.	Mfr.'s Type	Fig.	Description	Switch Function*	Contacts	EACH		
						1-99	100-499	500-999
676-5531	PN11SHNA03QE*	A	SPDT	Off-Mom.	Non-Shorting	.78	.69	.63
676-5532	PN12SHNA03QE†	A	SPDT	Off-On	Non-Shorting	.87	.76	.69
676-5536	PN22SNA03QE†	B	DPDT	Off-On	Non-Shorting	1.11	.96	.87
676-5537	PN21SNA03QE†	B	DPDT	Off-Mom.	Shorting	.92	.81	.74
676-5545	PN42LENA02QE†	C	4PDT	Off-On	Non-Shorting	1.24	1.08	.99

\*Mom.=Momentary. †Locking.

**EP Series  
Sealed Tiny Pushbutton Switches**



**Contact Rating:** 0.4 VA max. @ 20 VAC or VDC max. **Mechanical and Electrical Life:** 60,000 make-and-break cycles at full load. **Contact Resistance:** Below 20 milliohms typ. initial @ 2-4 VDC, 100 mA. **Insulation Resistance:** 10<sup>9</sup> ohms min. **Dielectric Strength:** 1000 Vrms min. @ sea level. **Operating Temperature:** -30°C to 85°C. **Solderability:** Per MIL-STD-202F method 208D, or EIA RS-186E method 9; 1 hour steam aging. **Case and Bushing:** UL 94V-0. **Actuator:** UL 94V-0, with standard internal o-ring seal. **Switch Support:** Brass, tin plated. **Contacts:** Gold plate over nickel plate. **Terminals:** Tin-lead alloy. **Terminal Seal:** Epoxy, 0.1" terminal spacing on thru-hole.

**SP Models with Extended Actuator Surface Mount**

Stock No.	Mfr.'s Type	Fig.	Description	Switch Function*	EACH		
					1-99	100-499	500-999
676-7320	EP11SD1SAKE	D	SPST	Off-Mom.	5.18	4.62	4.23

**PC Terminals**

Stock No.	Mfr.'s Type	Fig.	Description	Switch Function*	1-99	100-499	500-999
676-1920	EP11SD1CBE	E	SPST	Off-Mom.	4.24	3.78	3.46
676-1925	EP12SD1CBE	E	SPDT	On-Mom.	5.13	4.57	4.17
676-9209	EP21SD1CBE	E	DPST	Off-Mom.	7.77	6.87	6.34

**PC Terminals/Right Angle Mounting**

Stock No.	Mfr.'s Type	Fig.	Description	Switch Function*	1-99	100-499	500-999
676-1930	EP11SD1ABE	F	SPST	Off-Mom.	4.57	4.07	3.71
676-1935	EP12SD1ABE	F	SPDT	On-Mom.	5.46	4.86	4.44

**PC Terminals/Vertical Right Angle Mounting**

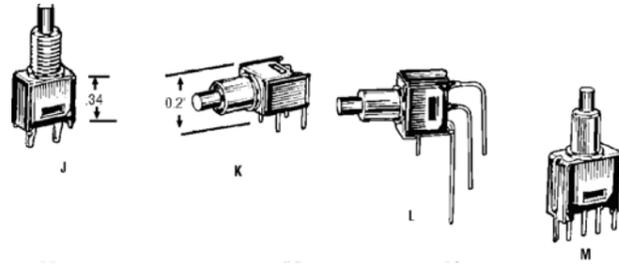
Stock No.	Mfr.'s Type	Fig.	Description	Switch Function*	1-99	100-499	500-999
676-1945	EP12SD1AVBE	G	SPDT	On-Mom.	5.62	5.00	4.56

**PC Terminals/Support Bracket**

Stock No.	Mfr.'s Type	Fig.	Description	Switch Function*	1-99	100-499	500-999
676-1950	EP11SD1V3BE	H	SPST	Off-Mom.	4.57	4.07	3.71

\*Mom. = Momentary.

**TP Series Tiny Pushbutton Switches**



**Plunger:** Thermoplastic polyester. **Bushings:** Brass, nickel plated. **Included Hardware:** Nut, locking ring, and lockwasher. **Switches with Solder Terminals.** **Contact Rating:** 1 amp at 120 VAC or 28 VDC (UL listed). **Contacts:** Coin silver, silver plated. **Terminals:** Brass, silver plated, 0.01" terminal spacing. **Switches with PC Terminals.** **Contact Rating:** 0.4 VA max. at 20 VAC or VDC max. **Contacts and Terminals:** Brass, with gold plate over nickel plate.

**Solder Terminals**

Stock No.	Mfr.'s Type	Fig.	Description	Switch Function*	EACH		
					1-99	100-499	500-999
676-2645	TP11SHZQE	J	SPST	Off-Mom.	5.11	4.55	4.16
676-2650	TP12SHZQE	J	SPDT	On-Mom.	6.56	5.84	5.34
676-2655	TP21SHZQE	J	DPST	Off-Mom.	6.75	6.13	5.60

**PC Terminals/Right Angle Mounting**

Stock No.	Mfr.'s Type	Fig.	Description	Switch Function*	1-99	100-499	500-999
676-7175	TP11SH8ABE	K	SPST	Off-Mom.	5.58	4.94	4.55
676-2660	TP11SH9ABE	K	SPST	Off-Mom.	5.59	4.98	4.55
676-2665	TP21SH9ABE	K	SPDT	On-Mom.	7.04	6.27	5.73

**PC Terminals/Vertical Right Angle Mounting**

Stock No.	Mfr.'s Type	Fig.	Description	Switch Function*	1-99	100-499	500-999
676-9211	TP11SH9AVBE	L	SPST	Off-Mom.	5.57	4.93	4.22

**PC Terminals/Support Bracket**

Stock No.	Mfr.'s Type	Fig.	Description	Switch Function*	1-99	100-499	500-999
676-2685	TP12SH9V3BE	M	SPDT	On-Mom.	7.00	6.23	5.70
676-2690	TP21SH9V3BE	M	DPST	Off-Mom.	10.47	9.52	8.69

\*Mom. = Momentary.

**8500 Series  
Subminiature Pushbutton Switches**

**Bushing:** Brass, nickel plated. **Plunger:** Black phenolic or glass filled polyester. **Case:** Black diallyl phthalate. **Operating Temperature:** -30°C to 65°C. **Included Hardware:** Nut and lockwasher. **Contacts:** Coin silver, silver plated. **Terminals:** Brass, silver plated.

**853 Models.** **Contact Rating:** 1 amp at 120 VAC or 28 VDC (UL). **855 Models.** **Contact Rating:** 3 amps at 120 VAC or 28 VDC (UL).

Stock No.	Mfr.'s Type	Fig.	Description	Switch Function*	Bushing	EACH		
						1-99	100-499	500-999
676-0580	8531MZQE2	N	SPST	Off-Mom.	1/4-40	3.55	3.15	2.89
676-0585	8532MZQE2	N	SPST	Off-Mom.	1/4-40	3.55	3.16	2.89
676-0590	8533MZQE2	N	SPST	On-Mom.	1/4-40	4.37	3.89	3.57
676-0595	8534MZQE2	N	SPST	On-Mom.	1/4-40	4.87	4.33	3.97
676-0600	8551MZQE2	N	SPST	Off-Mom.	1/4-40	4.38	3.89	3.57
676-0605	8552MZQE2	N	SPST	Off-Mom.	1/4-40	4.38	3.89	3.56
676-0610	8531TZQE2	O	SPST	Off-Mom.	15/32-32	4.97	4.41	4.03
676-0615	8532TZQE2	O	SPST	Off-Mom.	15/32-32	4.97	4.41	4.03
676-0620	8533TZQE2	O	SPST	On-Mom.	15/32-32	4.95	4.42	4.04
676-0625	8534TZQE2	O	SPST	On-Mom.	15/32-32	5.46	4.86	4.44
676-0630	8551TZQE2	O	SPST	Off-Mom.	15/32-32	4.96	4.42	4.04
676-0635	8552TZQE2	O	SPST	Off-Mom.	15/32-32	4.97	4.41	4.03

\*Mom. = Momentary.

**8600 Series  
Microminiature Pushbutton Switches**

**Bushing:** Brass, nickel plated, 8-40 UNS 2 amps. **Height:** 0.175". **Plunger:** Black nylon or glass filled. **Case:** Diallyl phthalate. **Operating Temperature:** -30°C to 65°C. **Included Hardware:** Nut. **Contacts:** Coin silver, silver plated.

**8631 and 8632 Models.** **Contact Rating:** 500 mA at 120 VAC or 28 VDC; 250 mA at 250 VAC (UL).

**8633 Models.** **Contact Rating:** 250 mA at 120 VAC or 28 VDC; 125 mA at 250 VAC.

Stock No.	Mfr.'s Type	Fig.	Description	Switch Function*	Terminals	EACH		
						1-99	100-499	500-999
676-0655	8631C0D2	P	SPST	Off-Mom.	PC	4.88	4.35	3.97
676-0661	8632C0D2	P	SPST	Off-Mom.	PC	4.11	3.66	3.34
676-9212	8631ZBD2†	Q	SPST	Off-Mom.	Solder	4.78	4.21	3.90
676-0641	8631Z0D2	Q	SPST	Off-Mom.	Solder	4.78	4.27	3.89
676-0645	8632Z0D2	Q	SPST	Off-Mom.	Solder	4.78	4.27	3.89
676-0650	8633ZQE2†	Q	SPST	On-Mom.	Solder	4.97	4.44	4.04

\*Mom. = Momentary. †Contacts: Gold, gold plated. ‡This switch comes standard with epoxy seal.