General Specifications

Electrical Capacity (Resistive Load)

Power Level (silver): 6A @ 125V AC or 3A @ 250V AC;
4A @ 30V DC (On-On circuit) & 3A @ 30V DC (all other circuits)

Logic Level (gold): 0.4VA maximum @ 28V AC/DC maximum
(Applicable Range 0.1mA ~ 0.1A @ 20mV ~ 28V)

Logic/Power Level (gold over silver): Combines silver & gold ratings
Note: Find additional explanation of dual rating & operating range in Supplement section.

Other Ratings

Contact Resistance: 10 milliohms maximum for silver; 20 milliohms maximum for gold

Insulation Resistance: 1,000 megohms minimum @ 500V DC

Dielectric Strength: 1,000V AC minimum between contacts for 1 minute minimum;
1,500V AC minimum between contacts & case for 1 minute minimum

Mechanical Life: 50,000 operations minimum

Electrical Life: 25,000 operations minimum for silver; 50,000 operations minimum for gold

Contact Timing: Nonshorting (break-before-make)

Angle of Throw: 26°

Materials & Finishes

Lever: Brass with nickel plating

Actuator Clip: Polyacetal

Support Bracket: Brass with tin plating

Bushing/Housing: Glass fiber reinforced polyamide (UL94V-0)

Sealing Ring: Nitrile butadiene rubber

Base: Glass fiber reinforced polyamide (UL94V-0)

Movable Contacts: Silver alloy with silver plating (code W); copper or phosphor bronze with gold plating (code G); or silver alloy with gold plating (code A)

Stationary Contacts: Silver alloy with silver plating (code W); copper or brass with gold plating (code G); or silver alloy with gold plating (code A)

Terminals: Copper or brass with silver or gold plating

Environmental Data

Operating Temp Range: –30°C through +85°C (–22°F through +185°F)

Humidity: 90 ~ 95% humidity for 96 hours @ 40°C (104°F)

Vibration: 10 ~ 55Hz with peak-to-peak amplitude of 1.5mm traversing the frequency range & returning in 1 minute; 3 right angled directions for 2 hours

Shock: 50G (490m/s^2) acceleration (tested in 6 right angled directions, with 5 shocks in each direction)

PCB Processing

Soldering: Wave Soldering Recommended: See Profile B in Supplement section.
Manual Soldering: See Profile B in Supplement section.

Cleaning: Automated cleaning. See Cleaning specifications in Supplement section.

Standards & Certifications

Flammability Standards: UL94V-0 rated bushing/housing & base

UL: **File No. E44145 - Recognized only when ordered with marking on switch.**
Add "/U" or "/CUL" before dash in part number to order UL recognized switch.
All models recognized at 6A @ 125V AC, 3A @ 250V AC, & 4A @ 30V DC or 0.4A @ 28V DC.

CSA: **File No. 023535_0_000 - Certified only when ordered with marking on switch.**
Add "/C" before dash in part number to order CSA certified switch.
All models certified at 6A @ 125V AC, 3A @ 250V AC, & 4A @ 30V DC.

TYPICAL SWITCH ORDERING EXAMPLE

M2T [2] [2] [TX] [G] [41] — [D] [C]

Poles

1	SPDT
2	DPDT

Circuits

2	ON	NONE	ON
3	ON	OFF	ON
5	ON	NONE	(ON)
8	(ON)	OFF	(ON)
9	ON	OFF	(ON)

( ) = Momentary

Mounting Frame

TX	For Actuators with Straight or Angle PC Mount

Contact Materials & Ratings

W	Silver; Rated 6A @ 125V AC & 3A @ 250V AC
G	Gold; Rated 0.4VA max @ 28V AC/DC max
A	Gold over Silver; Rated 6A @ 125V AC & 0.4VA max @ 28V AC/DC max

PC Terminals

13	Straight with .460″ (11.7mm) Bracket
30	.150″ (3.81mm) Right Angle
41	.150″ (3.81mm) Vertical

Rockers/Paddles

D	.365″ (9.27mm) Wide Rocker
E	.365″ (9.27mm) Wide Paddle
F	.450″ (11.43mm) Wide Rocker
G	.450″ (11.43mm) Wide Paddle

Rocker/Paddle Colors

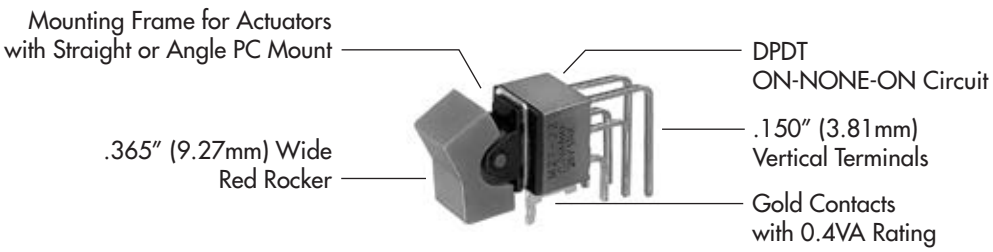
A	Black
B	White
C	Red
E	Yellow
F	Green
G	Blue
H	Gray

IMPORTANT:

Switches are supplied without UL, cULus & CSA marking unless specified. **UL, cULus & CSA recognized only when ordered with marking on the switch.** Specific models, ratings and ordering instructions are noted on the General Specifications page.

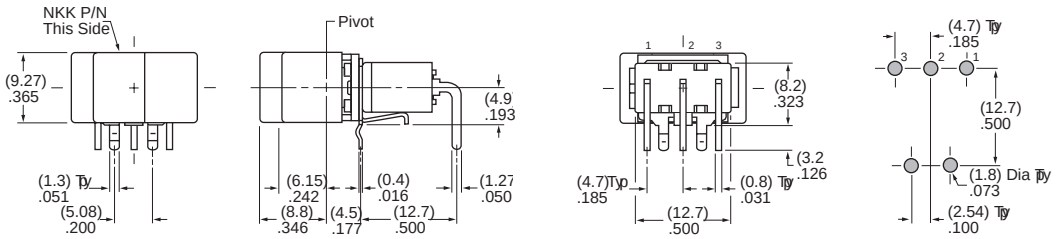
DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

M2T22TXG41-DC



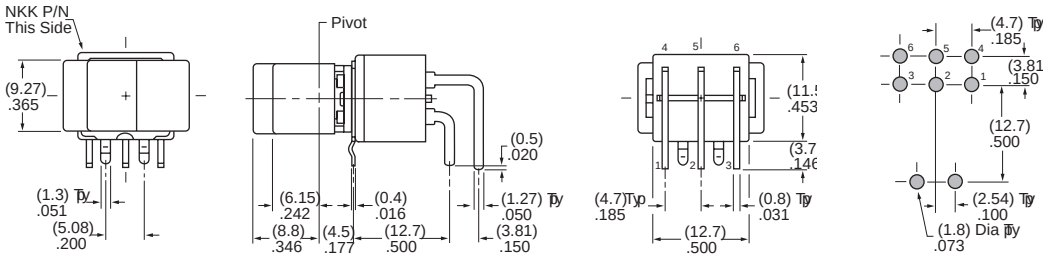
TYPICAL SWITCH DIMENSIONS

Single Pole — Right Angle PC



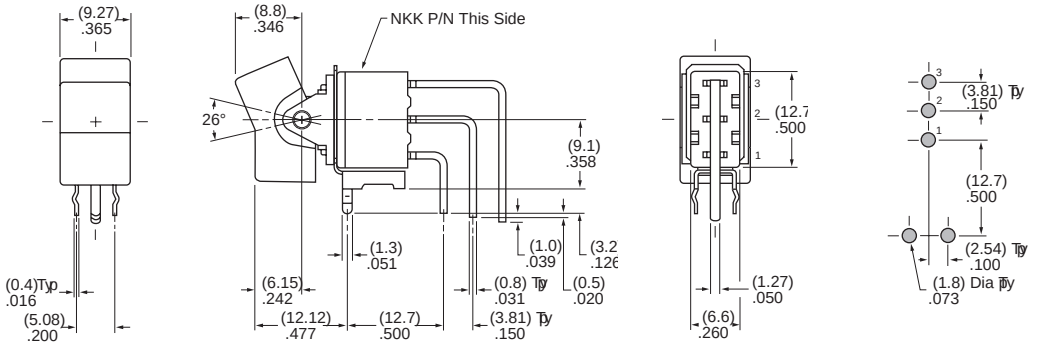
M2T12TXG30-DC

Double Pole — Right Angle PC



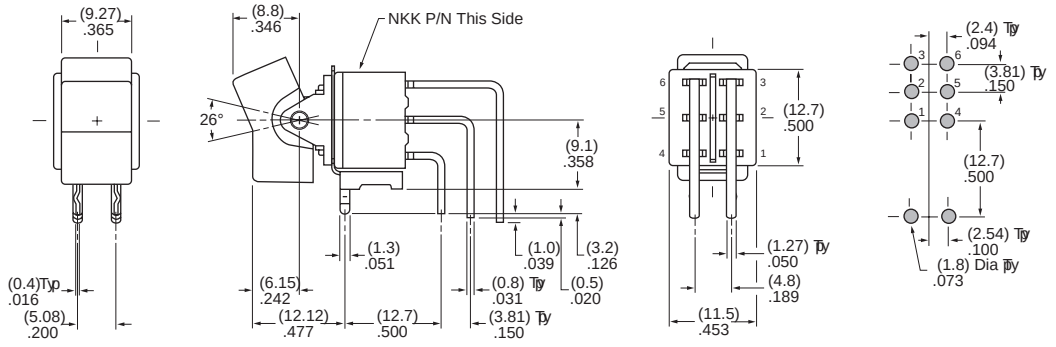
M2T22TXG30-DC

Single Pole — Vertical PC



M2T12TXG41-DC

Double Pole — Vertical PC

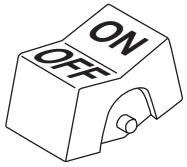


M2T22TXG41-DC

LEGENDS

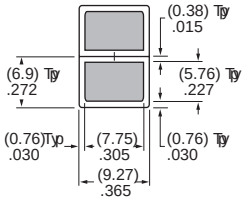
NKK Switches can provide custom legends for caps. Contact factory for more information.

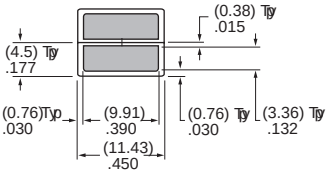
Suggested Printable Area for Cap



AT4148

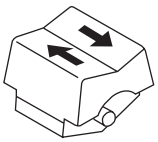
AT4150





Shaded areas are printable areas.

Recommended Print Method:

Pad Print

Epoxy based ink is recommended.