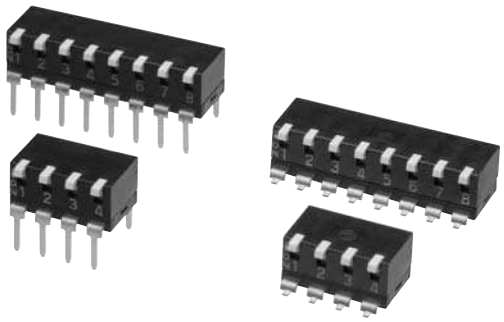
DIP Switch (Piano Type)

A6TR/A6SR

Low profile. End stackable design can be used individually and conjunctly.



- Low profile of 5mm and 2.54 pitch.
- SMT (surface-mounted terminal) models available with embossed taping specifications (unit of 700)
- Gold-plated twin contact and a slide-type self cleaning mechanisms ensure high reliability.
- RoHS

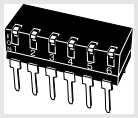
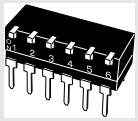
Application

Mode setting of MPU
Modem
Controller of servo motor
Coin changer
Program controller

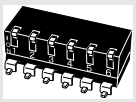
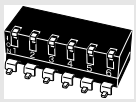
NEW

Ordering Information

● **DIP terminal**

Type (striker color)		Short lever (white)	Long lever (white)
			
No of poles	QTY/Stick		
2	95	**A6TR-2101**	**A6TR-2104**
4	47	**A6TR-4101**	**A6TR-4104**
6	31	**A6TR-6101**	**A6TR-6104**
8	23	**A6TR-8101**	**A6TR-8104**
10	18	**A6TR-0101**	**A6TR-0104**

● **SMT terminal**

Type (striker color)		Stick			Embossed taping models	
		Short lever (white)	Long lever (white)		Short lever (white)	Long lever (white)
						
No of poles	QTY/Stick			QTY/ Embossed tape		
2	95	**A6SR-2101**	**A6SR-2104**	700	**A6SR-2101-P**	**A6SR-2104-P**
4	47	**A6SR-4101**	**A6SR-4104**		**A6SR-4101-P**	**A6SR-4104-P**
6	31	**A6SR-6101**	**A6SR-6104**		**A6SR-6101-P**	**A6SR-6104-P**
8	23	**A6SR-8101**	**A6SR-8104**		**A6SR-8101-P**	**A6SR-8104-P**
10	18	**A6SR-0101**	**A6SR-0104**		**A6SR-0101-P**	**A6SR-0104-P**

Specifications

Switching capacity		24 VDC 25 mA, 3.5 VDC 10 μA (minimum current)
Ambient temperature		-20 to 70 °C 60% RH Max. (with no icing or condensation)
Ambient humidity		operatinjg : 35% to 90% (5 to 35 °C)
Insulation resistance		100MΩ min (Initial value)
Contact resistance		200 mΩ max (Initial value)
Dielectric strength		500 VAC for 1 min between terminals of the same polarity, and between terminals of different polarity
Vibration resistance	**Malfunction**	Malfunction:10 to 55HZ,1.5-mm double amplitude
Shock resistance	**Malfunction**	Malfunction: 300m/s² min
Life expectancy	**Mechanical**	1,000 operations min
	Electrical	1,000 operations min
Operating force		0.3 to 7.8 N
Weight	**DIP terminal**	0.25 g (2 poles), 0.50 g (4 poles), 0.76 g (6 poles), 1.02 g (8 poles), 1.28 g (10 poles)
	SMT terminal	0.24 g (2 poles), 0.48 g (4 poles), 0.73 g (6 poles), 0.97 g (8 poles), 1.22 g (10 poles)

Dimensions

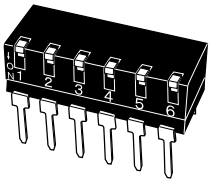
(Unit: mm)

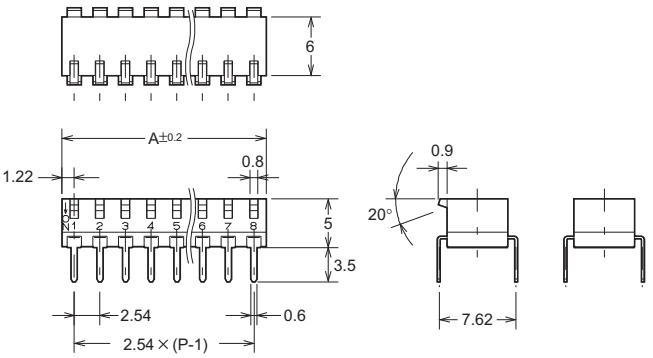
● **DIP terminal**

Short lever / Long lever

A6TR-□101

A6TR-□104





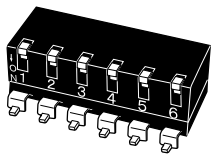
No of poles	Model		Dimension A
2	**A6TR-2101**	**A6TR-2104**	4.98
4	**A6TR-4101**	**A6TR-4104**	10.06
6	**A6TR-6101**	**A6TR-6104**	15.14
8	**A6TR-8101**	**A6TR-8104**	20.22
10	**A6TR-0101**	**A6TR-0104**	25.30

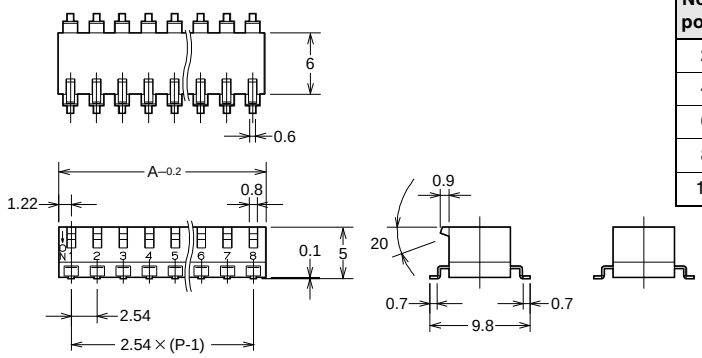
● **SMT terminal**

Short lever / Long lever

A6SR-□101

A6SR-□104

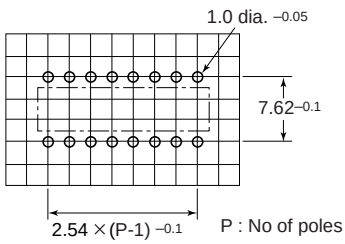




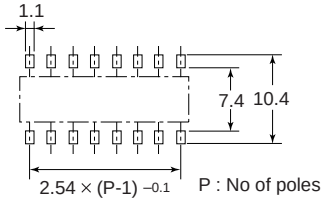
No of poles	Model		Dimension A
2	**A6SR-2101**	**A6SR-2104**	4.98
4	**A6SR-4101**	**A6SR-4104**	10.06
6	**A6SR-6101**	**A6SR-6104**	15.14
8	**A6SR-8101**	**A6SR-8104**	20.22
10	**A6SR-0101**	**A6SR-0104**	25.30

● **PBC Dimentions (Top View)**

DIP terminal

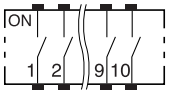


SMT terminal



Installation

Internal Connections (Top View)



Safety Precautions

● Soldering

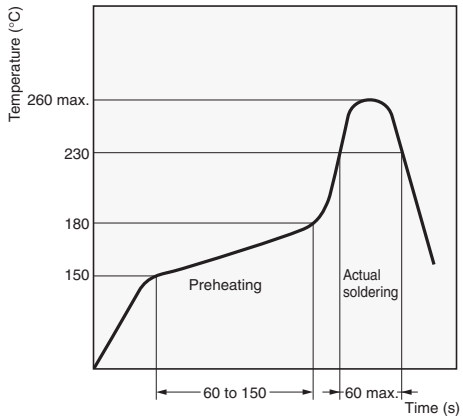
Observe the following conditions when soldering the A6TR/A6SR.

• **General Precautions for Soldering**

Make sure that the lever of A6TR/A6SR is set fully to OFF. Misalignment may result in reduced sensitivity due to the soldering heat.

• **Reflow Soldering (A6SR)**

Observe the following conditions for reflow soldering the A6SR. (Measurement location: Top of Switch)



• **Automatic Soldering Bath (A6TR)**

Soldering temperature: 260°C max. (Preheatine: 150°C • 120 s max.)
Soldering time: 5 s max.

● Washing

The A6TR/A6SR cannot be washed. Attempting to wash it may result in malfunction due to flux and foreign matter from the PCB flowing into the A6TR/A6SR together with the cleaning fluid.

● Using Flux

The type of flux or the amount or method in which it is applied, including its use in reflow soldering, can have adverse effects on Switch performance. Assess the proper flux, conditions, and methods prior to using it.

● RoHS Compliant

The "RoHS Compliant" designation indicates that the listed models do not contain the six hazardous substances covered by the RoHS Directive.

Reference: The following standards are used to determine compliance for the six substances.

- Lead: 1,000 ppm max.
- Mercury: 1,000 ppm max.
- Cadmium: 100 ppm max.
- Hexavalent chromium: 1,000 ppm max.
- PBB: 1,000 ppm max.
- PBDE: 1,000 ppm max.

● Environment for Storage and Use

To prevent discoloration of the terminals and other problems during storage, do not store the A6TR/A6SR in locations subject to the following conditions.

1. High temperatures or humidity
2. Corrosive gases
3. Direct sunlight

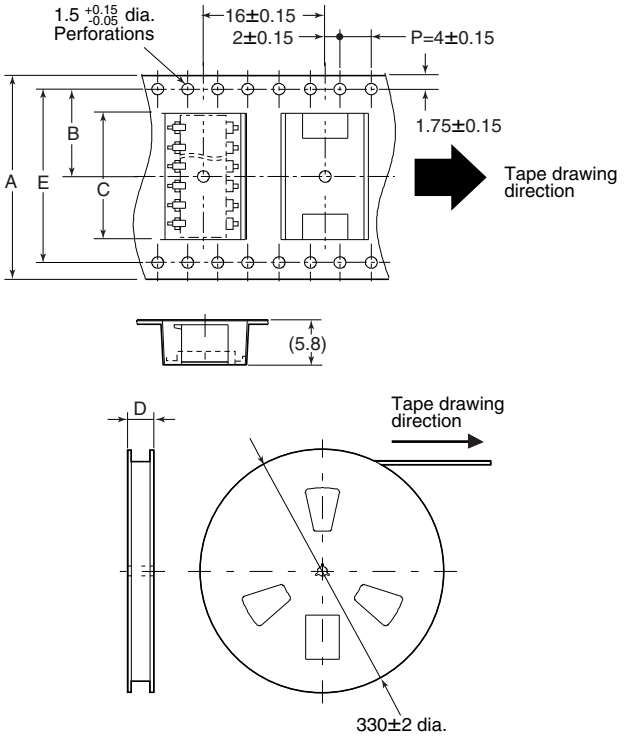
Also, the A6TR/A6SR is not waterproof or splash-resistant. Do not install or use the A6TR/A6SR in locations that are subject to contact with water.

Do not subject the A6TR/A6SR to freezing or condensation.

● DIP Switch operation

Do not apply excessive operating force to the Switch. Otherwise the Switch may be damaged or deformed, and the switch mechanism may malfunction as a result. Apply an operating force not exceeding 7.8 N. (Operate the actuator one operation at a time. Do not operate the Switch from the top of actuator. Otherwise the actuator may be damaged, so operate the Switch from the lower part of the actuator.)

● Packing Specifications



Note: The perforations along both sides are for Switches with 8 and 10 poles.

No of poles / Dimensions	2	4	6	8	10
A±0.3	16	24	24	32	44
B±0.15	7.5	11.5	11.5	14.2	20.2
C	5.4	10.5	15.6	20.7	25.7
D	(22)	(30)	(30)	(38)	(50)
E	—			28.4	40.4

ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.
To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

Cat. No. A169-E1-01 **In the interest of product improvement, specifications are subject to change without notice.**

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