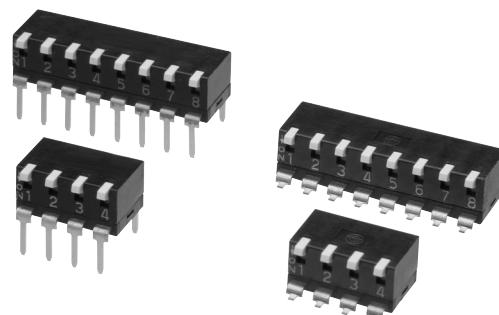


# DIP Switch (Piano Type) A6TR / A6SR

## Low profile, end stackable design conserves space.

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



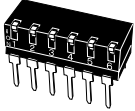
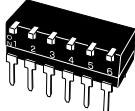
**NEW**

### Application

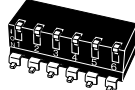
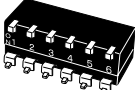
- Mode setting of MPU
- Modem
- Controller of servo motor
- Coin changer
- Program controller

## Ordering Information

### ● DIP terminal

Type		Short lever	Long lever
No of poles	QTY/Stick		
2	95	<b>A6TR-2101</b>	<b>A6TR-2104</b>
4	47	<b>A6TR-4101</b>	<b>A6TR-4104</b>
6	31	<b>A6TR-6101</b>	<b>A6TR-6104</b>
8	23	<b>A6TR-8101</b>	<b>A6TR-8104</b>
10	18	<b>A6TR-0101</b>	<b>A6TR-0104</b>

### ● SMT terminal

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

# Specifications

<b>Switching capacity</b>		24 VDC 25 mA, 3.5 VDC 10 $\mu$ A (minimum current)
<b>Ambient operating temperature</b>		-20 to 70 °C 60% RH Max. (with no icing or condensation)
<b>Ambient operating humidity</b>		35% to 90% (5 to 35 °C )
<b>Insulation resistance</b>		100M $\Omega$ min (Initial value)
<b>Contact resistance</b>		200 m $\Omega$ max (Initial value)
<b>Dielectric strength</b>		500 VAC for 1 min between terminals of the same polarity, and between terminals of different polarity
<b>Vibration resistance</b>	<b>Malfunction</b>	10 to 55HZ, 1.5-mm double amplitude
<b>Shock resistance</b>	<b>Malfunction</b>	300m/s <sup>2</sup> min (Approx. 30G min)
<b>Life expectancy</b>	<b>Mechanical</b>	1,000 operations min
	<b>Electrical</b>	1,000 operations min
<b>Operating force</b>		0.3 to 7.8 N (30.5 to 795 gf)
<b>Weight</b>	<b>DIP terminal</b>	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)
	<b>SMT terminal</b>	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

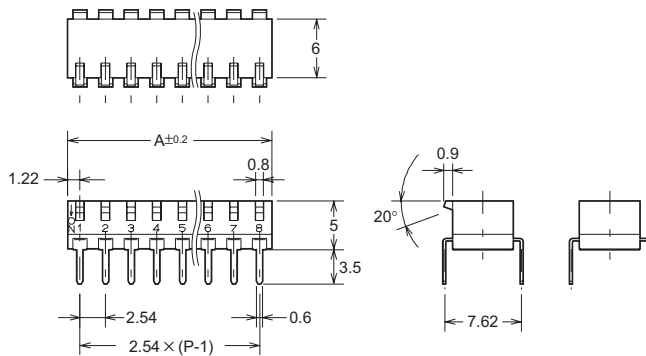
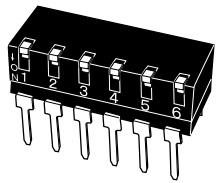
(Unit: mm)

### ● DIP terminal

Short lever / Long lever

A6TR-□101

A6TR-□104



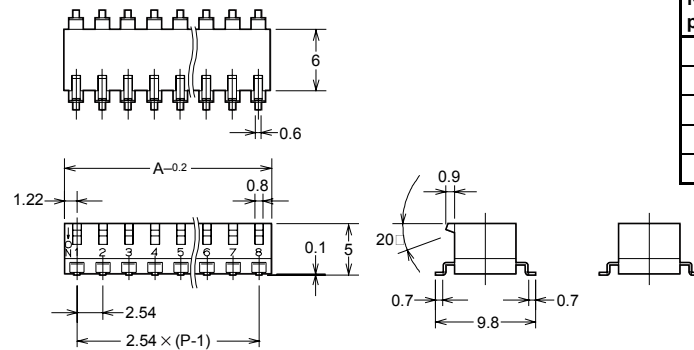
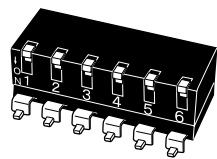
No of poles	Model		Dimension A
2	A6TR-2101	A6TR-2104	4.98
4	A6TR-4101	A6TR-4104	10.06
6	A6TR-6101	A6TR-6104	15.14
8	A6TR-8101	A6TR-8104	20.22
10	A6TR-0101	A6TR-0104	25.30

### ● SMT terminal

Short lever / Long lever

A6SR-□101

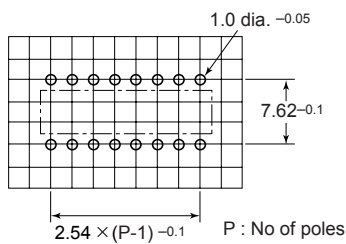
A6SR-□104



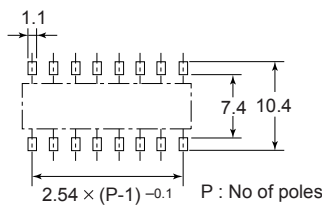
No of poles	Model		Dimension A
2	A6SR-2101	A6SR-2104	4.98
4	A6SR-4101	A6SR-4104	10.06
6	A6SR-6101	A6SR-6104	15.14
8	A6SR-8101	A6SR-8104	20.22
10	A6SR-0101	A6SR-0104	25.30

### ● PCB Dimensions (Top View)

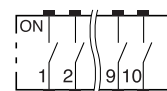
DIP terminal



SMT terminal



Internal Connections (Top View)



## Safety Precautions

### ● Soldering

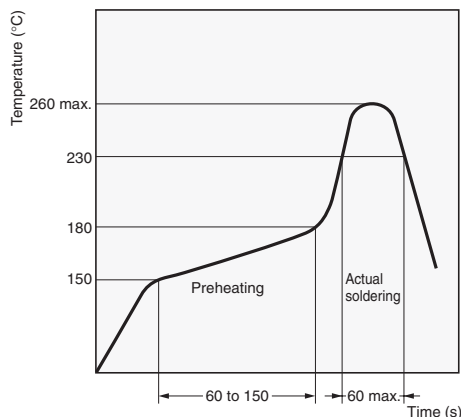
Observe the following conditions when soldering the A6TR/A6SR.

#### • 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. (Preheating: 150°C • 120 s max.)

Soldering time: 5 s max.

### ● Washing

The A6TR/A6SR cannot be washed. Attempting to wash these 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

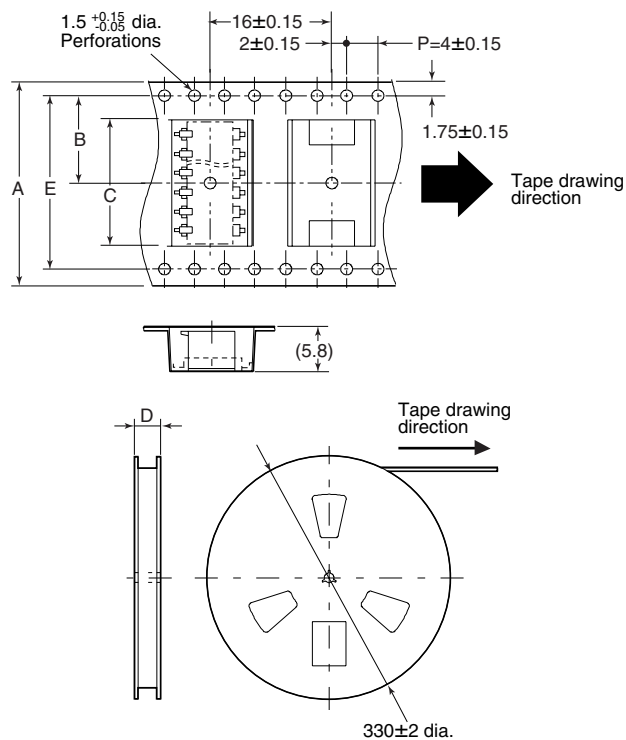
Also, the A6TR/A6SR is not waterproof or splash-resistant. Do not install or use the A6TR/A6SR in locations that are subject to contact with water.

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 (795 gf). 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. 2, 4, and 6 poles have only one row of perforations in the tape carrier.

Dimensions	No of poles				
	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

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  - Delivery and shipping dates are estimates only; and
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**ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.**

To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

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