

# Caution

#### 1. Use of chemicals

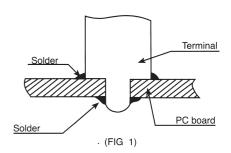
Synthetic resins such as polycarbonate are used in the potentiometer. therefore, Care must be taken not expose the resistor to thick atmosphere of ammonia, amins, alkali solution, aromatic hydrocarbon, ketenes, esters, halogeneous hydrocarbons, etc.

#### 2. Use of flux

When soldering, avoid using water-soluble flux, othrewise, it might cause and adverse effect on molding material and metal.

## 3. Soldering

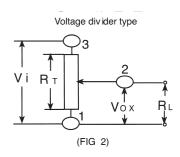
Avoid employing wiring designs and soldering methods in which molten solder flows over the upper surface of PC board, as illustrated in the schematic drawing. This could cause occurrences of imperfect contacts.



## 4. Recommended Circuit Configuration

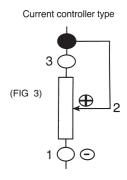
When using variable resistors, it is recommended that implement the product as voltage divider. The load resistance  $R_L$  of potentiometer should not less than 10 times of nominal resistance  $R_T$ , as shown in Fig 2.

In applications where a direct current is allowed to flow through the potentiometer's sliding arm, there could be a problem of anodic oxidation due to an unusual increase in resistance value. In this case, it is recommended that connecting the negative line to the resistance element and the positive line to the sliding arm. as shown in fig 3.



#### 5. Residual Resistance

Although electric poles of resistors are generally formed by silver printing, we provide carbon coating over the silver poles to enhance reliability against sulfurization. Contact us if you wish to use the part in a low residual resistance state.



#### 6. Dew Condensation

Avoid using the potentiometer where dew or water drops might occur on the surface of the resistor,etc. Deterioration of insulation or shorting may occur.





## 7. Stress Being Applied to the Terminals

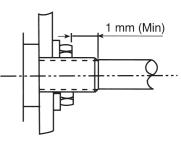
Care must be taken not to apply excessive stress when handling the terminals. Also, be sure to design appropriate soldering conditions.

#### 8. Looseness of the Shaft

When long shaft are being employed, the looseness (deviation)tends to grow in proportion to the shaft length. Conducting a test under actual operating conditions is recommended.

## 9 . Chassis Mounting

When this part is fastened to the chassis using a nut, excessive tightening may deteriorate the rotary contact performance, or strip the threads. Exercise care when tightening the nut.

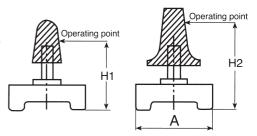


## 10 Operation at Low Temperature

When these products are expected to be used under low temperature environments such as applications for car radios or car stereos, we can customize them for easier and more smooth rotary movements. When placing orders, indicate whether the low temperature specification is necessary or not.

## 11. Lever length

If conditions permit, it is recommended that using the shortest lever (over 5mm) for the application. Since the length A of the slider is constant as shown, the shorter the length up to the operating point, the better slide feeling will be obtained. (The longer the length up to the operating point like H2, the more unfavorable slide feeling will be given.)



## 12 .Driving lever

It is recomended that not to make the operating point away from the center line of the lever as shown. For the same reason as mentioned above, the shorter the length B the better slide feeling will be obtained.

