

Version:  
January 12, 2017



# Adjustable Resistor Application Notes

## **Token Electronics Industry Co., Ltd.**

**Taiwan:** No.137, Sec. 1, Zhongxing Rd., Wugu District,  
New Taipei City, Taiwan, R.O.C. 24872  
Tel: +886 2981 0109 Fax: +886 2988 7487

**China:** 12F, Zhong Xing Industry Bld., Chuang Ye Road,  
Nan Shan District, Shen Zhen City,  
Guang Dong, China 518054  
Tel: +86 755 26055363; Fax: +86 755 26055365

[Web: www.token.com.tw](http://www.token.com.tw)

[Email: rfq@token.com.tw](mailto:rfq@token.com.tw)



## ▶ Application Notes

### Adjustable Resistor Application Notes

#### Determination of End Resistance Value of FVR, DQS, DSRA, DSRB, BSR, BSQ:

1. Resistance Range means you can choose one maximum resistance value (End resistance value) at one of FVR, DQS, DSRA, DSRB, BSR, BSQ VR (Adjustable Resistor) type.
2. After End Resistance Value confirmed, the minimum resistance (start resistance value) will be determined by depending on resistance of wire and wire wound type.

#### Power Rating of Adjustable Resistor:

The part Number formation of FVR, DQS, DSRA, DSRB, BSR, BSQ:

Product type -  Rated Wattage -  Resistance Value ( $\Omega$ ) -  Resistance Tolerance

- Product type means one of FVR, DQS, DSRA, DSRB, BSR, BSQ.
- Rated Wattage means power rating at End Resistance Value.
- Resistance Value ( $\Omega$ ) means maximum resistance value (End Resistance Value).
- Resistance Tolerance means precision range of End Resistance Value.

1. Power Rating of VR (Variable Resistor) is determined by the maximum resistance value (End Resistance Value).
2. Resistance and Power Rating should be decreased while you are adjusting the screw.

#### Notes:

- Adjustability is 10% to 90% of full resistance value.
- Wattage is proportional to this adjusted resistance value.

#### Power Rating:

- Based on 25°C free air rating. The stated wattage rating applies only when the entire resistance is in the circuit.
- Setting the lug at an intermediate point reduces the wattage rating by approximately the same proportion.
- Example: If the lug is set at half resistance, the wattage is reduced by approximately one-half.

If you need current constant type or special specifications, please feel free to contact us.