



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



### Fixed Metal (Oxide) Film Resistors, Surface Mount Type

Type: **ERG(X)1H (1 W)**  
**ERG(X)2H (2 W)**



#### ■ Features

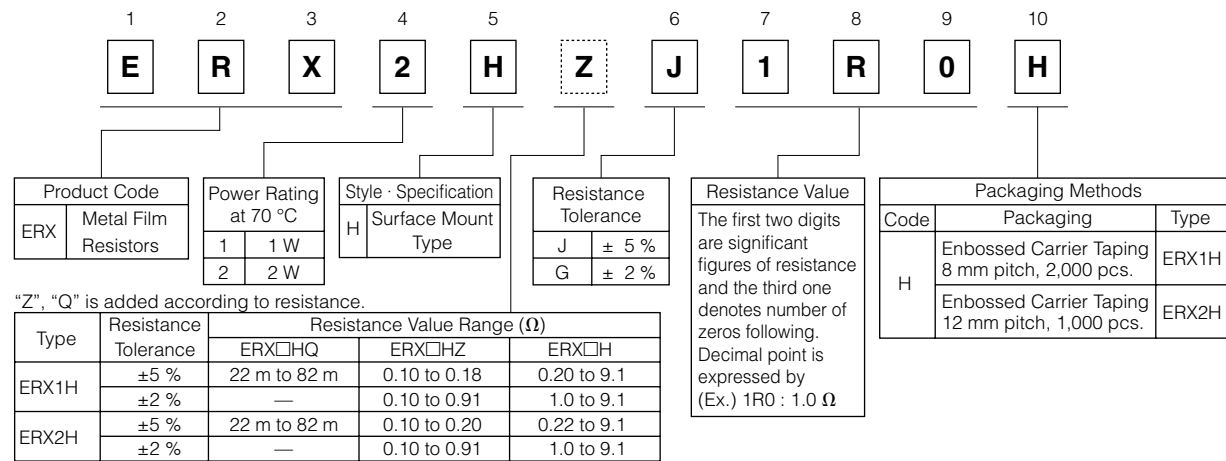
- Non-flammable
- High Reliability
- RoHS compliant

#### ■ Packaging Methods, Land Pattern, Soldering Conditions and Safety Precautions

Please see Data Files

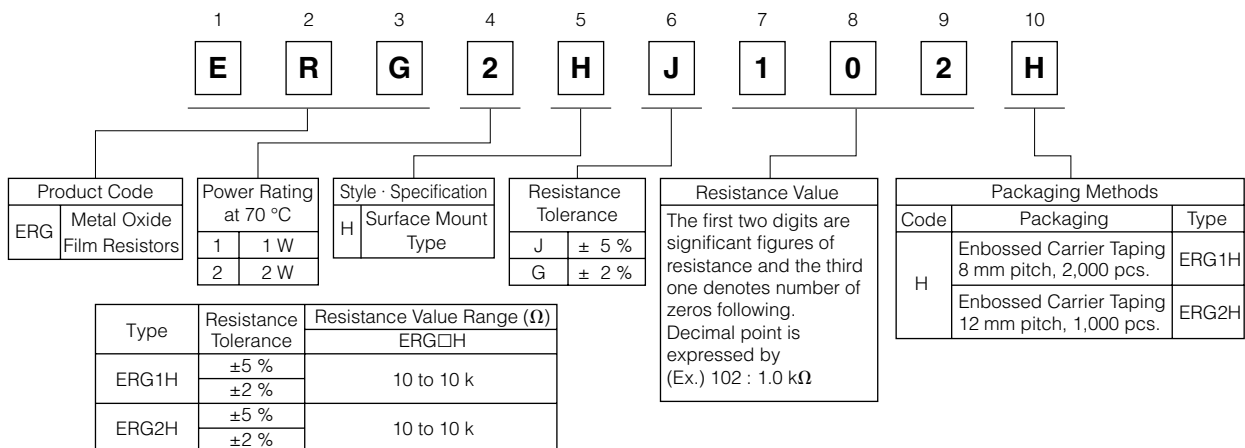
#### ■ Explanation of Part Numbers

Ex.1 : ERX type



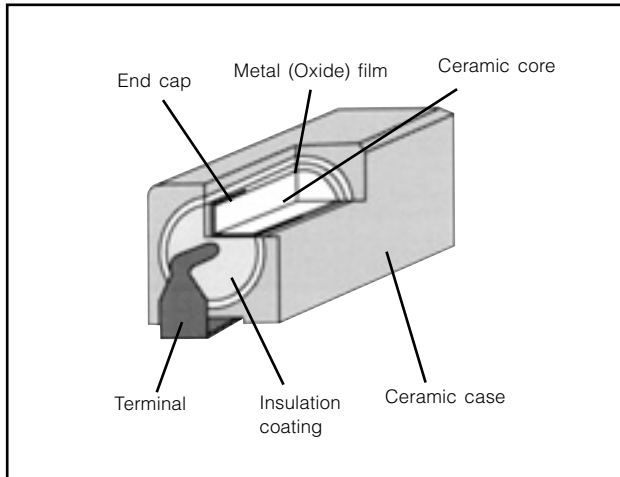
The above example 1 shows a metal film resistor SMD type, 2 W power rating, resistance value of 1.0 Ω, tolerance ±5 %, and embossed taping.

Ex.2 : ERG type

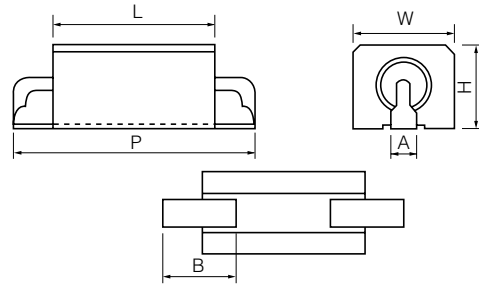


The above example 2 shows a metal oxide film resistor SMD type, 2 W power rating, resistance value of 1.0 kΩ, tolerance ±5 %, and embossed taping.

### Construction



### Dimensions in mm (not to scale)



| Type     | Dimensions (mm)                      |          |         |         |         |         |
|----------|--------------------------------------|----------|---------|---------|---------|---------|
|          | P                                    | L        | W       | H       | A       | B       |
| ERG(X)1H | 12.5 <sup>+1.0</sup> <sub>-0.5</sub> | 9.0±0.5  | 5.6±0.3 | 5.0±0.2 | 1.5±0.3 | 3.0±1.0 |
| ERG(X)2H | 15.0 <sup>+1.0</sup> <sub>-0.5</sub> | 12.0±0.5 | 6.4±0.3 | 5.8±0.2 | 1.5±0.3 | 4.0±1.0 |

### Ratings

| Type     | Power Rating at 70 °C (W) <sup>(1)</sup> | Dielectric Withstanding Voltage (VAC) | Res. Tol. (%) <sup>(2)</sup> | Resistance Range (Ω) <sup>(2)</sup> |      | T.C.R. (×10 <sup>-6</sup> /°C) | Standard Resistance Value |
|----------|--|---------------------------------------|------------------------------|-------------------------------------|------|--------------------------------|---------------------------|
|          |  |                                       |                              | min. <sup>(3)</sup>                 | max. |                                |                           |
| ERG(X)1H | 1  | 1000                                  | J (±5)                       | 22 m                                | 39 m | ±1000                          | E12                       |
|          |  |                                       |                              | 47 m                                | 82 m | ±500                           |                           |
|          |  |                                       | G (±2)<br>J (±5)             | 0.1                                 | 10 k | ±350                           |                           |
| ERG(X)2H | 2  | 1000                                  | J (±5)                       | 22 m                                | 39 m | ±1000                          | E12                       |
|          |  |                                       |                              | 47 m                                | 82 m | ±500                           |                           |
|          |  |                                       | G (±2)<br>J (±5)             | 0.1                                 | 10 k | ±350                           |                           |

(1) Rated Continuous Working Voltage (RCWV) shall be determined from  $RCWV = \sqrt{\text{Power Rating} \times \text{Resistance Value}}$ .

(2) Resistance tolerance and resistance range is of use besides range listed, please inquire.

(3) As for the low resistance value range, "Q" or "Z" is given to the part number. (Refer to the explanation of part numbers.)

### Power Derating Curve

For resistors operated in ambient temperatures above 70 °C, power rating shall be derated in accordance with the figure on the right.

