

Fixed Metal Film Resistors, Surface Mount Type

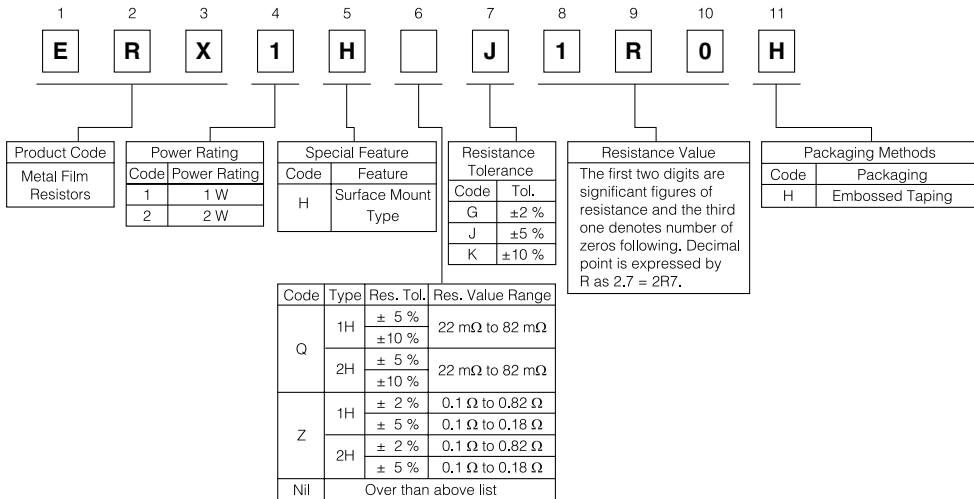
Type: **ERX1H(1 W)**
ERX2H(2 W)



■ Features

- **Resistance Value Range**
For electric power type surface mount resistors with range of 22 mΩ to 8.2 Ω.
- **Nonflammable Nature**
Uses inorganic material.
- **High Reliability**
Uses the ERXS type for resistor element.
- **Approved under the ISO 9001 system**

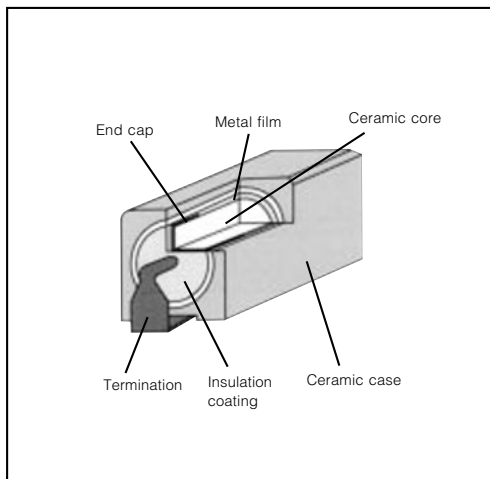
■ Explanation of Part Numbers



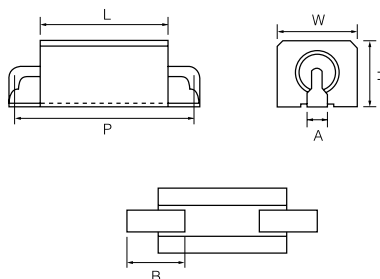
The above example shows a surface mount type metal film resistor, 1 W power rating, resistance value of 1.0 ohms, tolerance ±5 %, and embossed taping.

Panasonic

Construction



Dimensions in mm (not to scale)



Type	Dimensions (mm)					
	P	L	W	H	A	B
ERX1H	12.5 ^{+1.0} _{-0.5}	9.0±0.5	5.6±0.3	5.0±0.2	1.5±0.3	3.0±1.0
ERX2H	15.0 ^{+1.0} _{-0.5}	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 ⁽¹⁾ (W)	Dielectric Withstanding Voltage (VAC)	Res. Tol. (%) ⁽²⁾	Resistance Range (Ω) ⁽²⁾		T.C.R. ×10 ⁻⁶ /°C (ppm/°C)	Standard Resistance Value
				min. ⁽³⁾	max.		
ERX1H	1	1000	J (± 5)	22 m	39 m	±1000	E12
			K (±10)	47 m	82 m	± 500	
			G (± 2)	0.1	8.2	± 350	
			J (± 5)				
ERX2H	2	1000	J (± 5)	22 m	39 m	±1000	E12
			K (±10)	47 m	82 m	± 500	
			G (± 2)	0.1	8.2	± 350	
			J (± 5)				

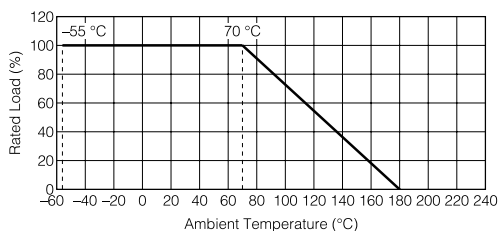
(1) Rated Continuous Working Voltage (RCWV) shall be determined from $RCWV = \sqrt{\text{Power Rating} \times \text{Resistance Value}}$.

(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 should be derated in accordance with the figure on the right.

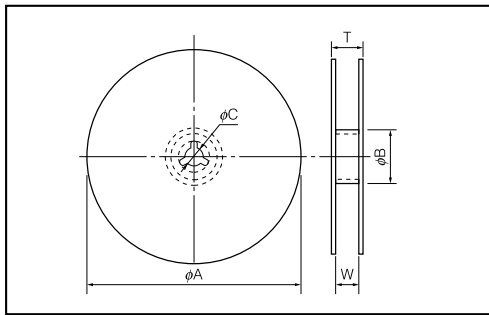


■ Packaging Methods

● Standard Quantity

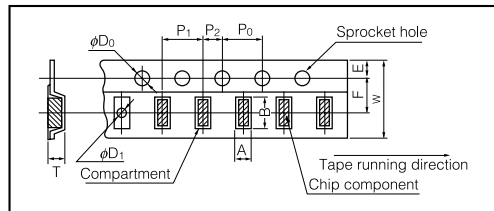
Type	Embossed Taping
ERX1H	2000 pcs./reel
ERX2H	1000 pcs./reel

● Taping Reel



Dimensions (mm)	Type	φA	φB	φC	W	T
	1H, 2H	380 ⁺³	80 ⁺²	13.0 ^{+1.0}	25.5 ^{+1.0}	29.5 ^{+1.0}

● Embossed Taping



Dimensions (mm)	Type	W	F	E	A	B	P ₁
	1H	24.0 ^{+0.30}	11.5 ^{+0.10}	1.75 ^{+0.10}	6.2 ^{+0.20}	13.7 ^{+0.20}	8.0 ^{+0.10}
	2H				7.0 ^{+0.20}	16.2 ^{+0.20}	12.0 ^{+0.10}

Dimensions (mm)	Type	P ₂	P ₀	φD ₀	φD ₁	T
	1H	2.00 ^{+0.10}	4.00 ^{+0.10}	1.50 ^{+0.10}	1.5 min.	5.7 ^{+0.10}
	2H					6.4 ^{+0.10}

⚠ Safety Precautions

(1) About transitional phenomena

Regarding impact voltage circuit, transient phenomena like application of high voltage for a short-time or high pulse voltage, confer with the engineer.

(2) Storage method

If the product is stored in the following environments and conditions, the performance and solderability may be badly affected. Avoid storage in the following environments.

- ① Storage in places full of corrosive gases such as sea breeze, Cl₂, H₂S, NH₃, SO₂ and NO₂.
- ② Storage in places exposed to direct sunlight.
- ③ Storage in places outside the temperature range of 5 to 35 deg. C and humidity range of 45 to 85 %RH.

(3) Precaution for use

1) The products in this catalog are intended for use in general standard applications for general electronic equipment (AV products, household electric appliances, office equipment, information and communication equipment, etc.); hence, they do not take use under the following special environments into consideration.

Accordingly, use in the following special environments, and such environmental conditions may affect the performance of the products; prior to use, verify the performance, reliability, etc. thoroughly.

- ① Use in liquids such as water, oil, chemical, and organic solvent.
- ② Use under direct sunlight and in outdoor and dusty atmospheres.
- ③ Use in places full of corrosive gases such as sea breeze, Cl₂, H₂S, NH₃, SO₂, and NO₂.
- ④ Use in environment with large static electricity and strong electromagnetic waves.
- ⑤ Where the product is close to a heating component, and where an inflammable such as a polyvinyl chloride wire is arranged close to the product.
- ⑥ Where the resistor is sealed and coated with resin, etc.
- ⑦ Where water or a water-soluble detergent is used in cleaning free soldering and in flux cleaning after soldering. (Pay particular attention to soluble flux.)

2) Do not apply excessive tension to the termination.