

Metal Film (Thin Film) Chip Resistors, High Sound Quality Type

Type: **ERA 2H**

Features

- High sound quality resistor Low distortion and high-quality sound by selected material and optimized structure
- High accuracy Small resistance tolerance and Temperature Coefficient of Resistance
- High performance Low current noise, excellent linearity
- Reference Standard IEC 60115-8, JIS C 5201-8, EIAJ RC-2133B
- RoHS compliant, Pb free, Halogen free

Recommended Applications

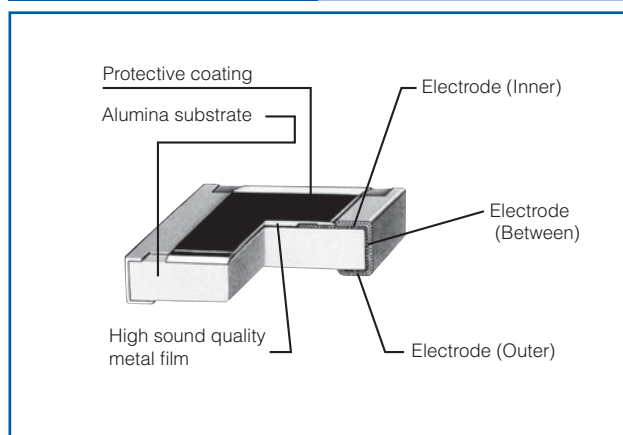
- Audio amplifier circuit, Smartphone (Hi-fi audio), portable audio player, portable DAC amplifier

■ **As for Packaging Methods, Land Pattern, Soldering Conditions and Safety Precautions,**
Please see Data Files

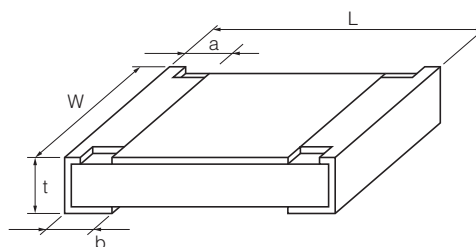
Explanation of Part Numbers

1	2	3	4	5	6	7	8	9	10	11	12
E	R	A	2	H	E	B	1	0	0	1	X
Product Code		Size, Power Rating		Temperature Coefficient		Resistance Tolerance		Packaging Methods			
Metal Film Chip Resistors		Code	Inch	Power Rating	Code	T.C.R.	Code	Tolerance	Code	Packaging	Part No.
		2H	0402	0.063 W	R	$\pm 10 \times 10^{-6}/^{\circ}\text{C}$	B	$\pm 0.1 \%$	X	Punched Carrier Taping 2 mm pitch, 10000 pcs.	ERA2H
					E	$\pm 25 \times 10^{-6}/^{\circ}\text{C}$	C	$\pm 0.25 \%$	Resistance Value		
					H	$\pm 50 \times 10^{-6}/^{\circ}\text{C}$	D	$\pm 0.5 \%$			
					K	$\pm 100 \times 10^{-6}/^{\circ}\text{C}$					
Consist of four figures. The first three digits are significant figures of resistance and the fourth one denotes number of zeros following. (example) 1001 : 1k Ω											

Construction



Dimensions in mm (not to scale)



Part No. (inch size)	Dimensions (mm)					Mass (Weight) [g/1000pcs.]
	L	W	a	b	t	
ERA2H (0402)	1.00 ± 0.10	0.50 $^{+0.10}_{-0.05}$	0.20 ± 0.10	0.25 ± 0.10	0.35 ± 0.05	0.6

Ratings

Part No. (inch size)	Power Rating at 70 °C (W)	Limiting Element Voltage ⁽¹⁾ (V)	Maximum Overload Voltage ⁽²⁾ (V)	Part No. (detail)	Resistance Tolerance (%)	T.C.R. (×10 ⁻⁶ /°C)	Resistance Range ⁽³⁾ (Ω)	Category Temperature Range (°C)
ERA2H (0402)	0.063	25	50	ERA2HKD	±0.5	±100	10 to 46.4 (E24, E96)	-55 to +125
				ERA2HHD	±0.5	±50	22 to 46.4 (E24, E96)	
				ERA2HEC	±0.25	±25	47 to 20k (E24, E96)	
				ERA2HEB	±0.1			
				ERA2HRC	±0.25	±10		
				ERA2HRB	±0.1			

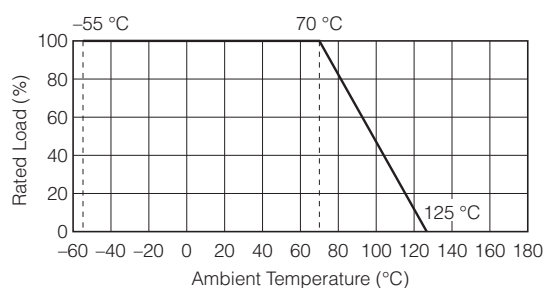
(1) Rated Continuous Working Voltage (RCWV) shall be determined from $\text{RCWV} = \sqrt{\text{Rated Power} \times \text{Resistance}}$ Values, or Limiting Element Voltage listed above, whichever less.

(2) Overload (Short-time Overload) Test Voltage (SOTV) shall be determined from $\text{SOTV} = 2.5 \times \text{RCWV}$ or max. Overload Voltage listed above whichever less.

(3) Other resistance except for E24 & E96 series values are also available. Please contact us for details.

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.



Mouser Electronics

Authorized Distributor

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Panasonic:

<u>ERA-2HRB2800X</u>	<u>ERA-2HRB3570X</u>	<u>ERA-2HRB4420X</u>	<u>ERA-2HRB3160X</u>	<u>ERA-2HRB2670X</u>	<u>ERA-2HRB2610X</u>
<u>ERA-2HRB90R9X</u>	<u>ERA-2HRB1100X</u>	<u>ERA-2HRB1180X</u>	<u>ERA-2HRB1500X</u>	<u>ERA-2HRB1870X</u>	<u>ERA-2HRC3301X</u>
<u>ERA-2HRC5491X</u>	<u>ERA-2HRC8451X</u>	<u>ERA-2HRC1542X</u>	<u>ERA-2HRC1742X</u>	<u>ERA-2HRB54R9X</u>	<u>ERA-2HRC9761X</u>
<u>ERA-2HRC1782X</u>	<u>ERA-2HRB49R9X</u>	<u>ERA-2HRB62R0X</u>	<u>ERA-2HRB1370X</u>	<u>ERA-2HRC4420X</u>	<u>ERA-2HRC1202X</u>
<u>ERA-2HRB1070X</u>	<u>ERA-2HRB2050X</u>	<u>ERA-2HRC6341X</u>	<u>ERA-2HRC6801X</u>	<u>ERA-2HRC6981X</u>	<u>ERA-2HRC3320X</u>
<u>ERA-2HRC1871X</u>	<u>ERA-2HRC3831X</u>	<u>ERA-2HRC3921X</u>	<u>ERA-2HRC1201X</u>	<u>ERA-2HRC5901X</u>	<u>ERA-2HRB2150X</u>
<u>ERA-2HEB1272X</u>	<u>ERA-2HEB1872X</u>	<u>ERA-2HRC1330X</u>	<u>ERA-2HRC1470X</u>	<u>ERA-2HRC2700X</u>	<u>ERA-2HRB2210X</u>
<u>ERA-2HRB2370X</u>	<u>ERA-2HRC9311X</u>	<u>ERA-2HRB73R2X</u>	<u>ERA-2HRB78R7X</u>	<u>ERA-2HRB1050X</u>	<u>ERA-2HRC3901X</u>
<u>ERA-2HRC8201X</u>	<u>ERA-2HRC1212X</u>	<u>ERA-2HRC1402X</u>	<u>ERA-2HRB60R4X</u>	<u>ERA-2HRB2200X</u>	<u>ERA-2HRC1181X</u>
<u>ERA-2HRC1801X</u>	<u>ERA-2HRC4301X</u>	<u>ERA-2HRC6191X</u>	<u>ERA-2HRC6651X</u>	<u>ERA-2HRC2941X</u>	<u>ERA-2HRB1240X</u>
<u>ERA-2HRB2260X</u>	<u>ERA-2HRC73R2X</u>	<u>ERA-2HRC1020X</u>	<u>ERA-2HRC1780X</u>	<u>ERA-2HRC3650X</u>	<u>ERA-2HRC56R2X</u>
<u>ERA-2HRC1870X</u>	<u>ERA-2HRC2490X</u>	<u>ERA-2HRC3010X</u>	<u>ERA-2HRC4020X</u>	<u>ERA-2HRB1130X</u>	<u>ERA-2HRB1650X</u>
<u>ERA-2HEB8871X</u>	<u>ERA-2HEB1072X</u>	<u>ERA-2HEB1242X</u>	<u>ERA-2HRC47R0X</u>	<u>ERA-2HEB1502X</u>	<u>ERA-2HEB1781X</u>
<u>ERA-2HEB1432X</u>	<u>ERA-2HRC8200X</u>	<u>ERA-2HRC1301X</u>	<u>ERA-2HRC1501X</u>	<u>ERA-2HRB76R8X</u>	<u>ERA-2HRC8660X</u>
<u>ERA-2HRC1961X</u>	<u>ERA-2HRC3571X</u>	<u>ERA-2HRC6811X</u>	<u>ERA-2HRC1692X</u>	<u>ERA-2HEB1501X</u>	<u>ERA-2HRC1372X</u>
<u>ERA-2HRC1872X</u>	<u>ERA-2HRB1200X</u>	<u>ERA-2HRB2430X</u>	<u>ERA-2HRC5760X</u>	<u>ERA-2HRC7680X</u>	<u>ERA-2HRC1052X</u>
<u>ERA-2HRC1502X</u>	<u>ERA-2HRC2002X</u>	<u>ERA-2HRB71R5X</u>	<u>ERA-2HRB84R5X</u>		