Metal Film (Thin Film) Chip Resistors, High Reliability Type 0402, 0603, 0805, 1206

Type: ERA 2A, 3A, 6A, 8A

Features

• High reliabilityStable at high temperature and humidity

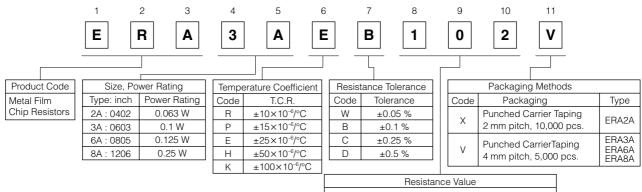
(85 °C 85 %RH rated load, Category temperature range: -55 to +155 °C)

- 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

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

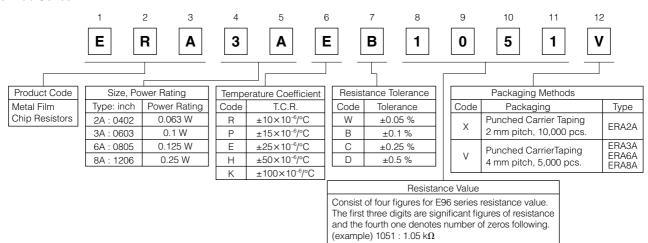
■ Explanation of Part Numbers

• E24 Series



Consist of three figures for E24 series resistance value. The first two digits are significant figures of resistance and the third one denotes number of zeros following. (example) 102 : $1 \text{ k}\Omega$

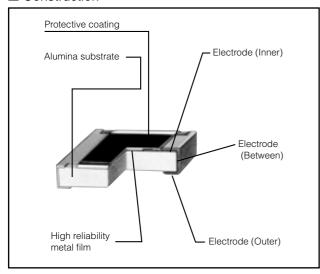
E96 Series



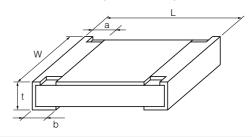
102

102

■ Construction



■ Dimensions in mm (not to scale)



Туре		Mass (Weight)					
(inch size)	L	W	а	b	t	[g/1000 pcs.]	
ERA2A (0402)	1.00 ^{±0.10}	0.50+0.10	0.15 ^{±0.10}	0.25 ^{±0.10}	0.35 ^{±0.05}	0.6	
ERA3A (0603)	1.60 ^{±0.20}	0.80 ^{±0.20}	0.30 ^{±0.20}	0.30 ^{±0.20}	0.45 ^{±0.10}	2	
ERA6A (0805)	2.00 ^{±0.20}	1.25 ^{±0.10}	0.40 ^{±0.25}	0.40 ^{±0.25}	0.50 ^{±0.10}	4	
ERA8A (1206)	3.20 ^{±0.20}	1.60+0.05	0.50 ^{±0.25}	0.50 ^{±0.25}	0.60 ^{±0.10}	8	

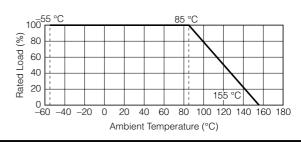
Ratings

Type (inch size)	Power Rating at 85 °C (W)	Limiting Element Voltage ⁽¹⁾ (V)	Maximum Overload Voltage ⁽²⁾ (V)	Type (detail)	Resistance Tolerance (%)	T.C.R. (×10 ⁻⁶ /°C)	Resistance Range ⁽³⁾ (Ω)	Category Temperature Range (°C)			
ERA2A (0402)	0.063	25	50	ERA2AKD	±0.5	±100	10 to 46.4 (E24, E96)	_55 to +155			
				ERA2AED	±0.5	±25	47 to 100 k (E24, E96)				
				ERA2AEB	±0.1	±ΖΟ	47 (U 100 K (L24, L90)				
				ERA2APB	±0.1	±15	200 to 47 k (E24, E96)				
				ERA2ARC	±0.25	±10	200 to 47 k (E24, E96)				
				ERA2ARB	±0.1						
ERA3A (0603)		75	150	ERA3AHD	±0.5	±50	10 to 46.4 (E24, E96)				
	0.1			ERA3AED	±0.5	±25	47 to 330 k (E24, E96)				
				ERA3AEB	±0.1		, ,				
				ERA3APB	±0.1	±15	470 to 100 k (E24, E96)				
				ERA3ARB	±0.1	±10	1 k to 100 k (E24, E96)				
				ERA3ARW	±0.05		, ,				
ERA6A (0805)	0.125	100	200	ERA6AHD	±0.5	±50	10 to 46.4 (E24, E96)	-33 10 +133			
				ERA6AED	±0.5	±25	47 to 1 M (E24, E96)				
				ERA6AEB	±0.1		, , ,				
				ERA6APB	±0.1	±15	470 to 100 k (E24, E96)				
				ERA6ARB	±0.1	±10	1 k to 100 k (E24, E96)				
				ERA6ARW			, ,				
ERA8A (1206)	0.25	150	300	ERA8AHD	±0.5	±50	10 to 46.4 (E24, E96)				
				ERA8AED	±0.5	±25	47 to 1 M (E24, E96)				
				ERA8AEB	±0.1						
				ERA8APB	±0.1	±15	470 to 100 k (E24, E96)				
				ERA8ARB	±0.1	±10	1 k to 100 k (E24, E96)				
				ERA8ARW	±0.05						

 ⁽¹⁾ Rated Continuous Working Voltage (RCWV) shall be determined from RCWV=√Rated Power × Resistance Values, or Limiting Element Voltage listed above, whichever less.
(2) Overload (Short-time Overload) Test Voltage (SOTV) shall be determined from SOTV=2.5 × Power Rating or max. Overload Voltage listed above

Power Derating Curve

For resistors operated in ambient temperatures above 85 °C, power rating shall be derated in accordance with the figure on the right.



⁽²⁾ Overload (Short-time Overload) Test Voltage (SOTV) shall be determined from SOTV=2.5 × Power Rating or max. Overload Voltage listed above whichever less.

⁽³⁾ E192 series resistance values are also available. Please contact us for details.