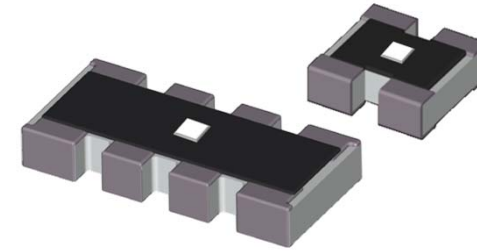


# Anti-Sulfur Array Resistors (Convex type : RPS Series)

## ■ Features

- ASTM B-809-95 Passed.
- Reducing SMD cost (75% reduced)
- Stable resistance in the H<sub>2</sub>S gas Atmosphere.
- RoHS Compliant.



## ■ Part Number System

RPS	
Type	
RPS	Anti-Sulfur Convex Type Array Resistor

10	
Size	
10	1005
16	1608

4P	
# of Resistors	
2P	2 pieces
4P	4 pieces

J	
Tolerance	
J	±5%

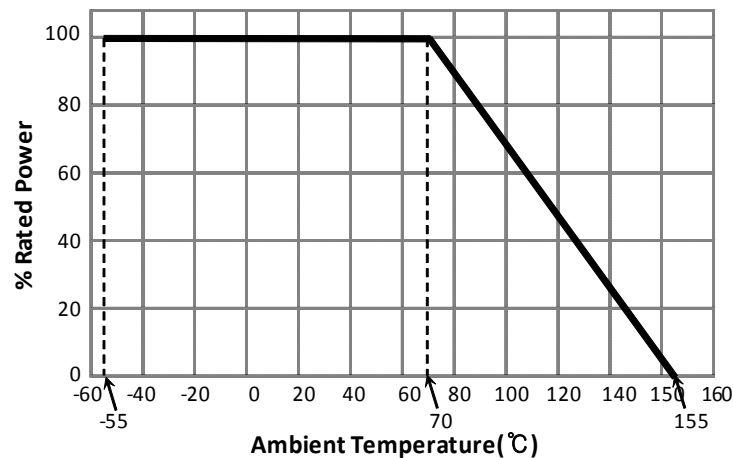
\* Jumper : 'J'

100	
Resistance Value	
3-digit coding (E-24 series)	

\* Jumper : '000'

CS	
Packing Type	
CS	7" reel
ES	10" reel
AS	13" reel

## ■ Power Derating Curve



## ■ Jumper Ratings

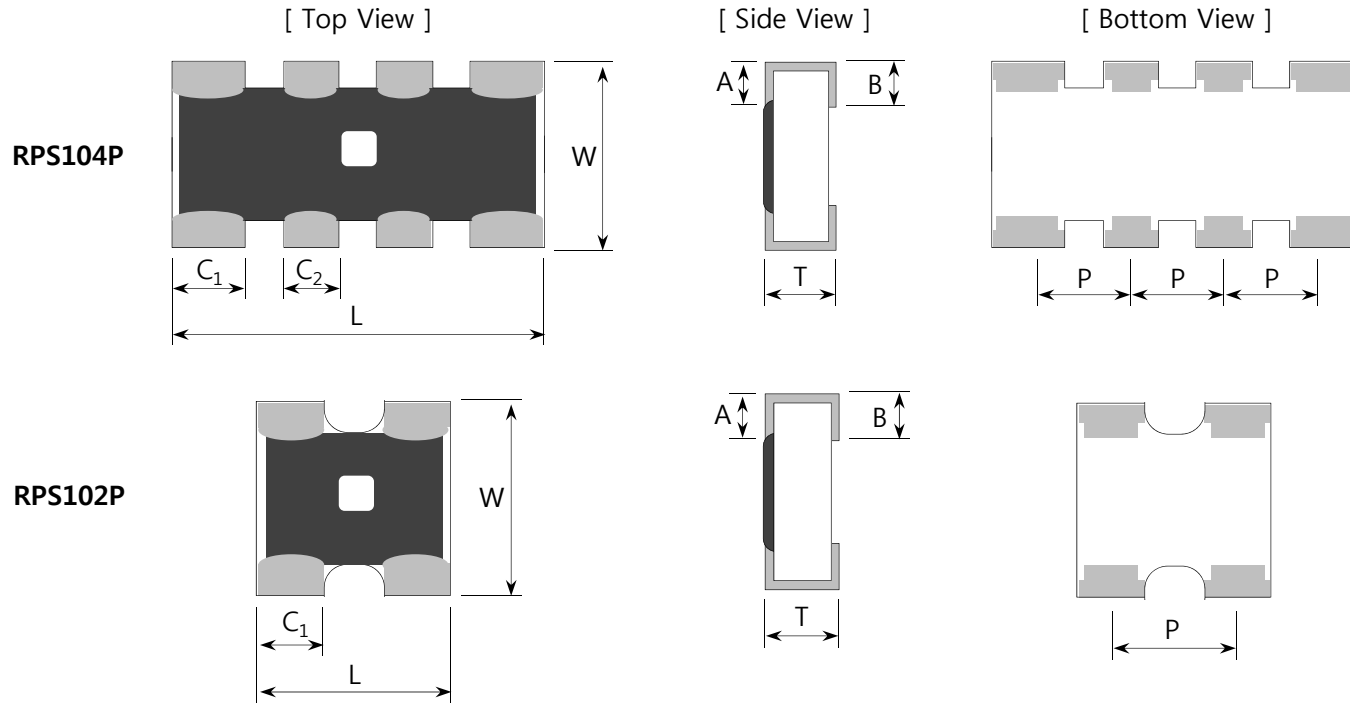
TYPE	Rated Current (A)	Max Overload Current (A)
102P, 104P	1	2
162P, 164P	1	2

## ■ Rated Voltage

$$V = \sqrt{P \times R}$$

V : Rated Voltage (V)  
 P : Rated Power (W)  
 R : Resistance Value (Ω)

### ■ Structure and Dimensions



[ Unit : mm ]

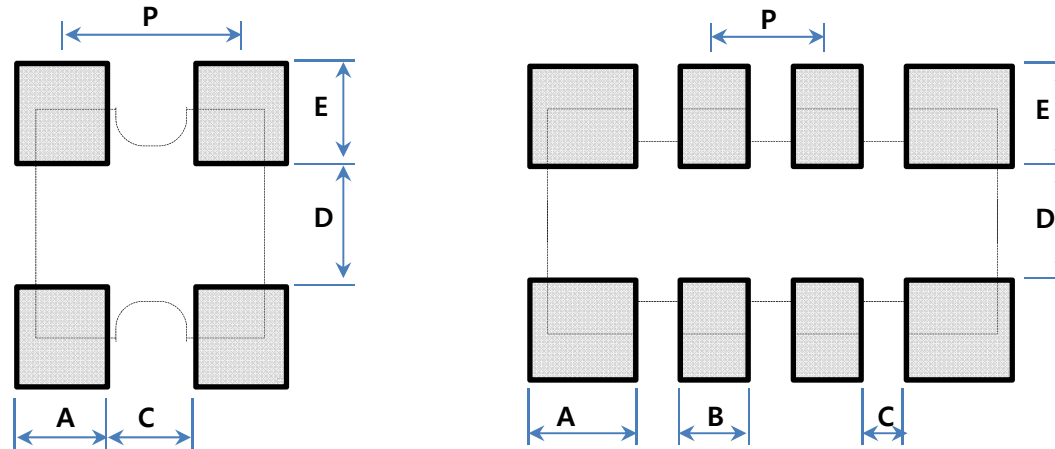
Size(mil)	L	W	T	A	B	C <sub>1</sub>	C <sub>2</sub>	P	Unit Weight
RPS102P(0404)	1.00±0.10	1.00±0.10	0.35±0.10	0.20±0.10	0.25±0.10	0.33±0.10	-	0.65±0.10	1.1mg
RPS104P(0804)	2.00±0.10	1.00±0.10	0.35±0.10	0.20±0.10	0.25±0.10	0.40±0.10	0.30±0.10	0.50±0.15	2.2mg
RPS164P(1206)	3.20±0.10	1.60±0.10	0.50±0.10	0.30±0.15	0.30±0.15	0.60±0.15	0.40±0.15	0.80±0.15	8.9mg

### Application Characteristics

Type	Size [inch]	Rated Power [W]	Rated Voltage [V]	Max Working Voltage [V]	Tolerance [%]	Resistance Range [ $\Omega$ ]	T.C.R [ppm/ $^{\circ}$ C]	Working Temp. [ $^{\circ}$ C]	Moisture Level
RPS102P	0404	1/16	$\sqrt{P \times R}$ P : Rated Power(W) R : Resistance( $\Omega$ )	25	±5(J)	1 ~ 1M	1~9.9 : ±300 10~1M : ±200	-55 ~ 155	Level 1
RPS104P	0804	1/16		25					
RPS164P	1206	1/16		50					

• Please contact our sales representatives or engineers for other specifications

### Standard Soldering Pad Dimensions



[ Unit : mm ]

Size(mil)	A	B	C	D	E	P
RPS102P(0404)	0.4	-	0.25	0.5	0.5	0.65
RPS104P(0804)	0.5	0.3	0.2	0.5	0.5	0.5
RPS164P(1206)	0.7	0.5	0.3	0.9	0.8	0.8

## ■ Performance Characteristics

ITEM	Requirements Specification		Test Conditions (JIS C 5201-1)
	Resistors	Jumpers	
<b>Resistance</b>	Within the specified tolerance	Max 50mΩ	JIS C 5201-1 4.5
<b>Temperature Characteristic</b>	Within the specified T.C.R	Max 50mΩ	JIS C 5201-1 4.8 +20°C → -55°C / +20°C → +125°C
<b>Short time Overload</b>	$\Delta R < \pm 1\% + 0.1\Omega$	Max 50mΩ	JIS C 5201-1 4.13 Rated Voltage×2.5, 5sec
<b>Solderability</b>	Immersed over 95%		JIS C 5201-1 4.17 Rosin Ethanol (25%WT) 245+5/-0°C, 2±0.5 sec
<b>Resistance to Solder Heat</b>	$\Delta R < \pm 1\% + 0.1\Omega$	Max 50mΩ	JIS C 5201-1 4.18 260±5°C, 10±1 sec
<b>Temperature Cycle</b>	$\Delta R < \pm 1\% + 0.1\Omega$	Max 50mΩ	JIS C 5201-1 4.19 -55°C ↔ +125°C, 100 cycle
<b>Moisture Resistance</b>	$\Delta R < \pm 3\% + 0.1\Omega$	Max 50mΩ	JIS C 5201-1 4.24 40±2°C, 90~95%RH, 1000 <sup>+48</sup> hours
<b>Load Life</b>	$\Delta R < \pm 3\% + 0.1\Omega$	Max 50mΩ	JIS C 5201-1 4.25 Rated Voltage, 70±2°C, 1000 <sup>+48</sup> hours 90mins ON, 30mins OFF
<b>High Temp. Exposure</b>	$\Delta R < \pm 3\% + 0.1\Omega$	Max 50mΩ	JIS C 5201-1 4.25.3 155±2°C, 1000 <sup>+48</sup> hours
<b>Flower of Sulfur (FOS)</b>	$\Delta R < \pm 1\% + 0.1\Omega$	Max 50mΩ	105°C, Dry sulfur 50g, 750 <sup>+48</sup> hours

※ The reliability test condition can be replaced by the corresponding accelerated test condition.

 Product specifications included in the specifications are effective as of March 01, 2015.

Please be advised that they are standard product specifications for reference only.

We may change, modify or discontinue the product specifications without notice at any time.

So, you need to approve the product specifications before placing an order.

Should you have any question regarding the product specifications,

please contact our sales personnel or application engineers.

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