

*Using breakthrough technology,  
we aim for products that will create new markets.*

## New Product News

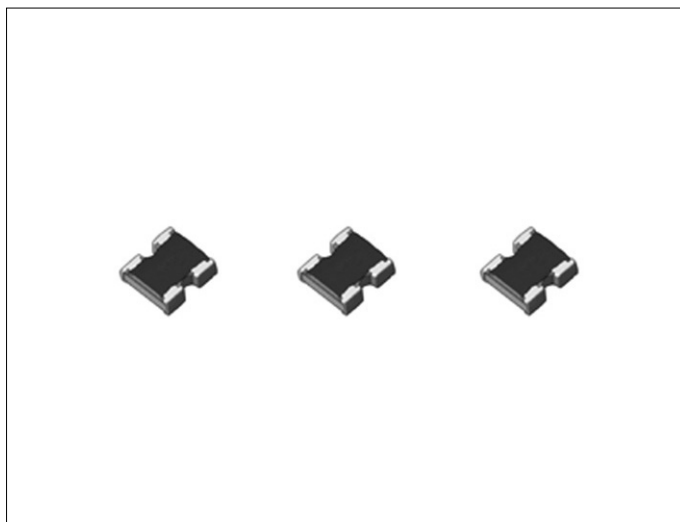
Minimum size in the market, World's first development

### Chip resistor network

#### 0404 Balanced O type chip attenuator

Industry/Field: Mobile communication

## Balanced O type attenuator in 0404 chip



### • Development Target:

Market: Equipment that needs attenuation, level-adjustment, impedance-matching in balanced circuit RF signal

Aim: Reducing the mounting occupation area and the number of chips

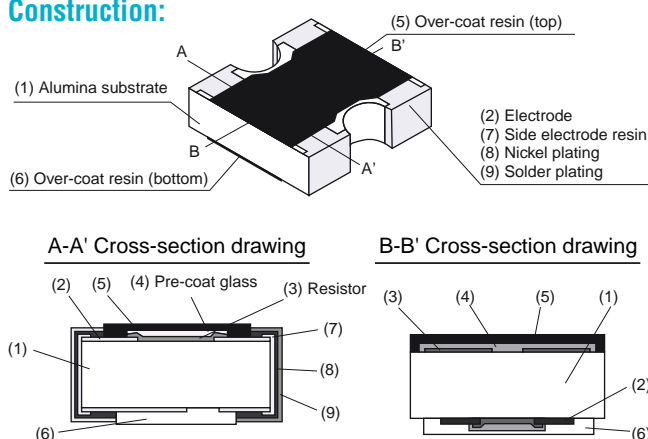
---Contributing to the downsizing and the down weighting

### • Features:

- 1** Reducing the mounting occupation area: about 67% reduction compared with attenuator circuit consisted of four 0402 chip resistors
- 2** Reducing the mounting times : 4 times to 1 time
- 3** Superior high frequency characteristics

• Number of industrial property rights: 1 (pending)

### • Construction:



### • Characteristics/specifications:

Attenuation value	0 dB, 1 dB, 2 dB, 3 dB, 6 dB, 10 dB
Attenuation value tolerance	0 dB to 3 dB : $\pm 0.8$ dB 6 dB : $\pm 1.0$ dB 10 dB : $\pm 2.0$ dB
Characteristic impedance	100 $\Omega$ , 200 $\Omega$ , 300 $\Omega$
Rated power (70°C max.)	0.04 W / package
Frequency range	DC to 2.5 GHz
VSWR (Voltage Standing Wave Ratio)	1.2 max. (typical value) 1.5 max. (0 dB, typical value)

### • Applications/usage examples:

- Attenuation, level-adjustment, impedance-matching in RF signal of mobile phone

### • Explanation of part numbers:

1	2	3	4	5	6	7	8	9	10	11	12
E	X	B	2	4	A	B	6	G	1	R	X
Common code											
0404 size balanced O type chip attenuator											