Chip Attenuator

Type: **EXB 14AT**
EXB 24AT

Features

- Unbalanced π type attenuator circuit in one chip
  EXB14AT (0.8 mm × 0.6 mm), EXB24AT (1.0 mm × 1.0 mm)
- Reduced mounting area :
  EXB14AT : About 60 % smaller than the area of an attenuator circuit consisting of three 0603 chip resistors, almost equal to the area of three 0402 chip resistors
  EXB24AT : About 50 % smaller than the area of an attenuator circuit consisting of three 1005 chip resistors, almost equal to the area of three 0603 chip resistors
- Mounting cost reduction : (Only 1 chip placed as compared to 3)
- Attenuation : 1 dB to 10 dB
- RoHS compliant

Recommended Applications

- Attenuation / level control / impedance matching of high frequency
  (communication signalling equipment cellular phones(GSM, CDMA, PDC, etc.), PHS, PDAs)

■ 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	X	B	1	4	A	T	3	A	R	3	X

Product Code
Thick Film Resistor Network

Code	Dimensions and Circuit Configuration
14AT	0.8 mm × 0.6 mm (inch size : 0302) π type attenuator
24AT	1.0 mm × 1.0 mm (inch size : 0404) π type attenuator

Attenuation Value
One-digit number /one letter shows attenuation value
(ex.) 1→1 dB, A→10 dB

Characteristics Impedance

A	50 Ω

Tolerance

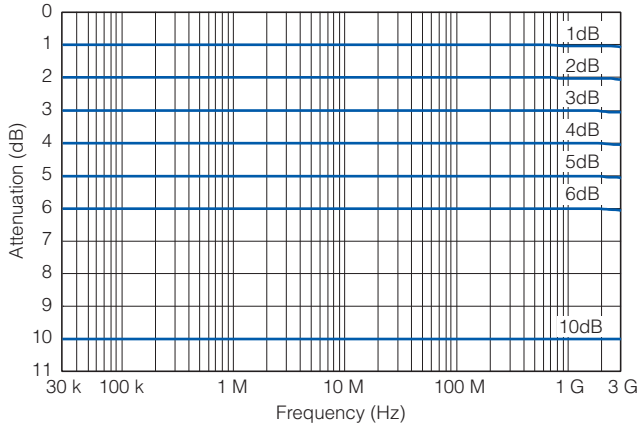
R3	±0.3 dB
R5	±0.5 dB

Packaging

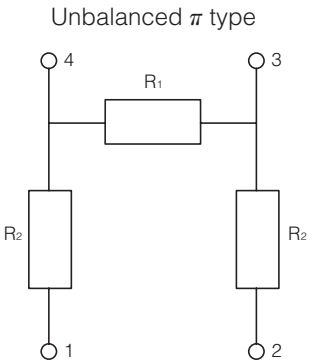
X	Punched Carrier Taping 2 mm pitch, 10,000 pcs.

Attenuation-Frequency Characteristics

(EXB14AT, EXB24AT)

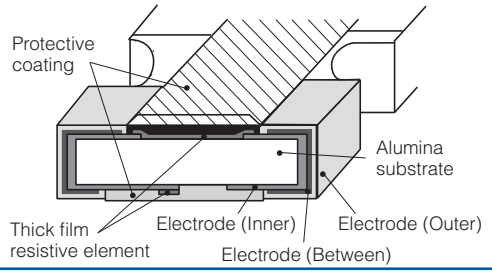


Circuit Configuration

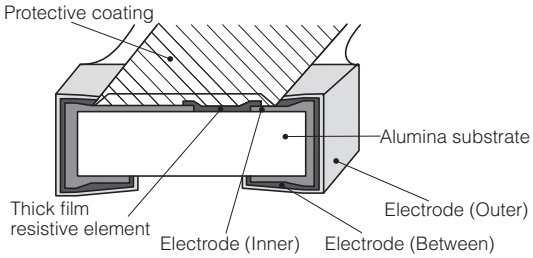


Construction

EXB14AT

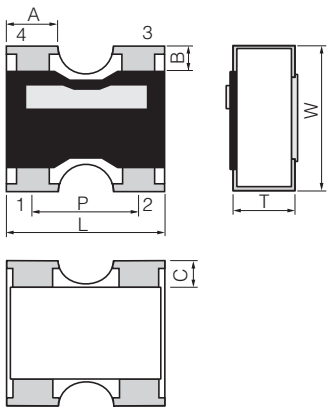


EXB24AT



Dimensions in mm (not to scale)

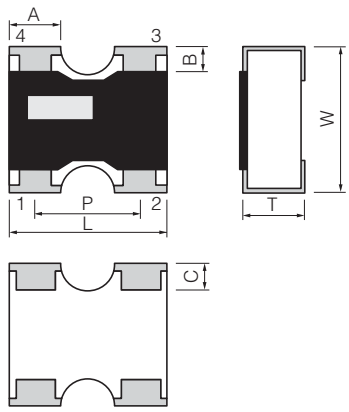
EXB14AT



Dimensions (mm)	L	W	T	A	B	C	P (typical value)
	$0.80^{\pm0.10}$	$0.60^{\pm0.10}$	$0.35^{\pm0.10}$	$0.35^{\pm0.10}$	$0.15^{\pm0.10}$	$0.15^{\pm0.10}$	0.50

<Marking Configuration>
The bar marking for recognizing terminal direction is located on the side of terminal 3, 4.
Mass (Weight) [1000 pcs.] : 0.7 g

EXB24AT



Dimensions (mm)	L	W	T	A	B	C	P (typical value)
	$1.00^{\pm0.10}$	$1.00^{\pm0.10}$	$0.35^{\pm0.10}$	$0.40^{\pm0.10}$	$0.15^{\pm0.10}$	$0.25^{\pm0.10}$	0.65

<Marking Configuration>
The bar marking for recognizing terminal direction is located on the side of terminal 4.
Mass (Weight) [1000 pcs.] : 1.1 g

Ratings

Part No.	EXB14AT, EXB24AT
Attenuation Value	1 dB, 2 dB, 3 dB, 4 dB, 5 dB, 6 dB, 10 dB*
Attenuation Value Tolerance	1 dB, 2 dB, 3 dB, 4 dB, 5 dB : ±0.3 dB 6 dB, 10 dB : ±0.5 dB
Characteristic Impedance	50 Ω
Power Rating	0.04 W /package
Frequency Range at 70 °C	DC to 3.0 GHz
VSWR (Voltage Standing Wave Ratio)	1.3 max.
Number of Resistors	3 resistors
Number of Terminals	4 terminals
Category Temperature Range	–55 °C to +125 °C

✻ Please inquire about the other Attenuator value

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.