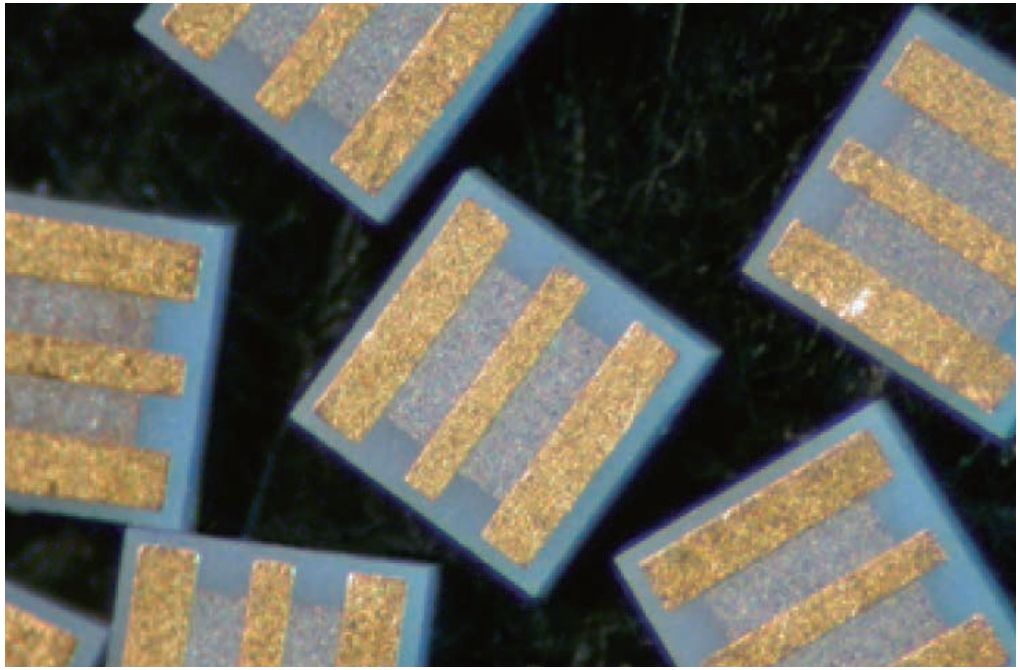
Thin Film Chip Resistors



Features

Suitable for both gold-tin soldering and epoxy die attachment.

Single and multiple value chips; Square and rectangular configurations.

Inventory of standard designs for quick delivery.

Uses

Noise filtering and termination.
Matching for various purposes.

Specifications

Characteristic Parameters	Specifications
Available Chip Size: L x W x t	Square: 0.4 x 0.4 x 0.25mm to 0.8 x 0.8 x 0.25mm (16 x 16 x 10mils to 31 x 31 x 10mils)
	Rectangle: 0.5 x 1.0 x 0.25mm (20 x 40 x 10mils)
Alumina Purity	≧99.4%
Relative Permittivity	εr=9.8 @10GHz
	εr=10.3 @1MHz
Design Type	Type A (no border on bottom face)
Metallization	Top: TaN / TiW / Au
	Bottom: TiW / Pt / Au
Nominal Resistance Values	SA Series: 10Ω to 1KΩ
	MB Series: 10Ω x 2 to 50Ω x 2
Resistance Tolerances	J = ±5%
	K = ±10%
	M = ±20%
Temperature Characteristic of Resistance (TCR)	-100 ± 50ppm /°C (@ -55°C to +70°C)
Resistor Rated Power	100mW @< 70°C
Heat Resistance	320°C x 5min Max N_2 atmosphere

Key to Part Numbers

(1) (2) (3) (4) (5) (6) (7) (8) (9)

P/N: S A W 101 K 2A 2 1 H

(1) Resistance Type
- S: Single Value
- M: Multi Value

(2) Resistors per Chip
- A: 1
- B: 2

(3) Top face Metallization
- W: TaN/TiW/Au

(4) Nominal Resistance code
- 1R0: 1Ω
- 100: 10Ω
- 101: 100Ω
- 102: 1000Ω

(5) Resistance Tolerance code
- J: ±5%
- K: ±10%
- M: ±20%

(6) Rated Power Code
- 2A: 100mA

(7) Chip Thickness Code
- 2: 0.25mm (10mils)

(8) Chip Backside Finish Code
- 0: No Metallization
- 1: TiW/Pt/Au
- 2: TiW/Pt

(9) Size
- F: 0.40 x 0.40mm (16 x 16mils)
- H: 0.50 x 0.50mm (20 x 20mils)
- P: 0.80 x 0.80mm (31 x 31mils)
- HR: 0.50 x 1.00mm (20 x 40mils)

Product List

Design		Part No.	Resistance Value Ω (Tolerance ±10%)	Outer dimensions (LxWxt) mm / mils	Sheet resistance (Ω/□)
SA Series		SAW100K2A21H	10	0.50±0.05x0.50±0.05x0.25±0.05 20±2x20±2x10±2	50
		SAW250K2A21F	25	0.40±0.025x0.40±0.025x0.25±0.05 16±1x16±1x10±2	50
		SAW250K2A21H	25	0.50±0.05x0.50±0.05x0.25±0.05 20±2x20±2x10±2	50
		SAW500K2A21F	50	0.40±0.025x0.40±0.025x0.25±0.05 16±1x16±1x10±2	100
		SAW500K2A21H	50	0.50±0.05x0.50±0.05x0.25±0.05 20±2x20±2x10±2	75
		SAW500K2A21HR	50	0.50±0.05x1.00±0.05x0.25±0.05 20±2x40±2x10±2	50
		SAW500K2A21P	50	0.80±0.05x0.80±0.05x0.25±0.05 31±2x31±2x10±2	75
		SAW750K2A21HR	75	0.50±0.05x1.00±0.05x0.25±0.05 20±2x40±2x10±2	75
		SAW101K2A21H	100	0.50±0.05x0.50±0.05x0.25±0.05 20±2x20±2x10±2	100
		SAW101K2A21HR	100	0.50±0.05x1.00±0.05x0.25±0.05 20±2x40±2x10±2	50

Design		Part No.	Resistance Value Ω (Tolerance ±10%)	Outer dimensions (LxWxt) mm / mils	Sheet resistance (Ω/□)
SA Series		SAW201K2A21H	200	0.50±0.05x0.50±0.05x0.25±0.05 20±2x20±2x10±2	50
		SAW102M2A21H	1000(±20%)	0.50±0.05x0.50±0.05x0.25±0.05 20±2x20±2x10±2	100
MB Series		MBW200K2A21P	10.0x2	0.80±0.05x0.80±0.05x0.25±0.05 31±2x31±2x10±2	50
		MBW250K2A21P	12.5x2	0.80±0.05x0.80±0.05x0.25±0.05 31±2x31±2x10±2	50
		MBW500K2A21P	25.0x2	0.80±0.05x0.80±0.05x0.25±0.05 31±2x31±2x10±2	50
		MBW750K2A21P	37.5x2	0.80±0.05x0.80±0.05x0.25±0.05 31±2x31±2x10±2	75
		MBW101K2A21P	50.0x2	0.80±0.05x0.80±0.05x0.25±0.05 31±2x31±2x10±2	100