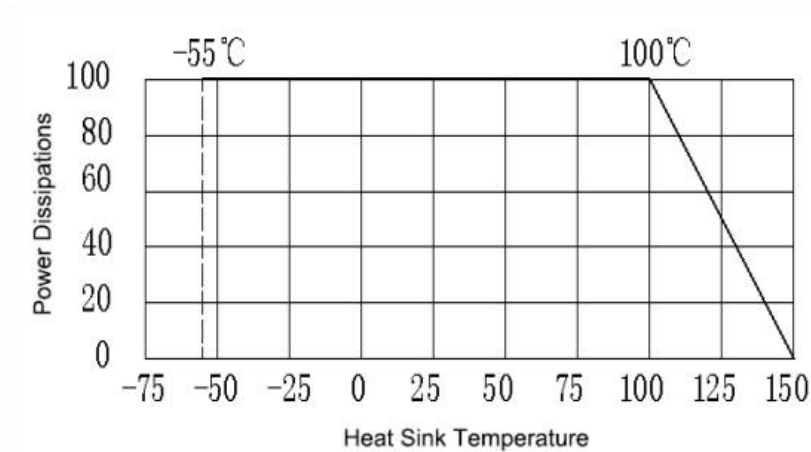


## Surface Mount Terminations

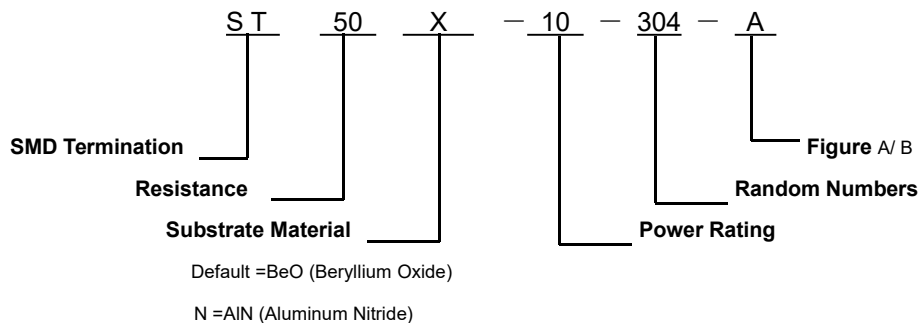
### Electrical Features

- ✧ **Nominal Impedance:** 50  $\Omega$
- ✧ **Resistive Tolerance:**  $\pm 5\%$  standard;  $\pm 3\%$ ,  $\pm 2\%$ ,  $\pm 1\%$  available
- ✧ **Substrate Material:** Beryllium Oxide (BeO), Aluminum Nitride (AlN)
- ✧ **Power Rating:** 1W-500W
- ✧ **Operating Temperature:**  $-55^{\circ}\text{C}$  to  $+150^{\circ}\text{C}$
- ✧ **Temperature Coefficient:**  $\pm 150\text{ppm}/^{\circ}\text{C}$
- ✧ **Installation Method:** Gold wire bonding on the front side, soldering or bonding on the back.

### Power Derating



### HOW TO ORDER



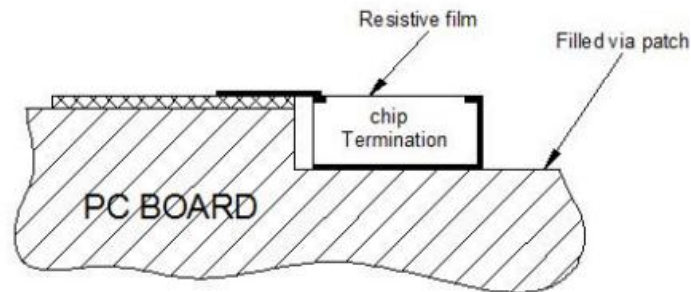
## General Specifications and Dimensions

Part Number	Substrate	Power Rating (W)	Frequency Range (GHz)	VSWR (Max.)	Dimensions (mm)		
					L	W	T
ST50N-1-301A	AlN	1	DC-64	1.50:1	1.02	1.02	0.38
ST50N-5-301A	AlN	5	DC-42.5	1.50:1	1.02	1.02	0.38
ST50-6-301A	BeO	6	DC-18	1.30:1	1.27	1.27	0.38
ST50-10-710A	BeO	10	DC-18	1.35:1	2.54	1.27	0.38
ST50N-12-701A	AlN	12	DC-18	1.20:1	1.27	2.54	0.38
ST50N-15-801A	AlN	15	DC-18	1.20:1	1.5	3.0	0.38
ST50-20-421B	BeO	20	DC-6	1.20:1	5.0	2.5	0.6
ST50-30-406A	BeO	30	DC-18	1.20:1	2.5	5.0	0.6
ST50-60-106A	BeO	60	DC-6	1.25:1	6.0	6.0	1.0
ST50-100-201A	BeO	100	DC-6	1.25:1	6.0	9.0	1.0
ST50-150-301A	BeO	150	DC-3	1.20:1	9.5	6.35	1.0
ST50-250-025A	BeO	250	DC-3	1.20:1	9.5	9.5	1.5
ST50-500-726A	BeO	500	DC-1	1.25:1	12.7	12.7	2.0

\* Customized products are available, please consult with Kete.

## Installation Instruction

1. When welding devices or leads, it is best to use a temperature-controlled soldering iron and keep the temperature at 260°C.
2. Drill a heat dissipation hole on the PCB, and fill the heat dissipation hole with solder.
3. The lead is welded on the PCB and should be flush with the surface of the product and PCB.



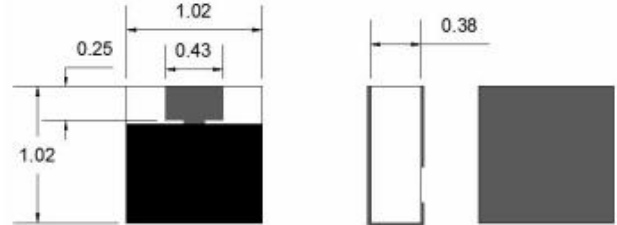
## Surface Mount Terminations

**Part Number: ST50N-1-301A**

### Electrical Specifications

- ✧ **Nominal Impedance:** 50  $\Omega$
- ✧ **Resistive Tolerance:**  $\pm 5\%$  standard
- ✧ **Substrate Material:** AlN
- ✧ **Power Rating:** 1W
- ✧ **Frequency Range:** DC-64GHz
- ✧ **VSWR:**  $\leq 1.50:1$
- ✧ **Operating Temperature:**  $-55^{\circ}\text{C}$  to  $+150^{\circ}\text{C}$
- ✧ **Temperature Coefficient:**  $\pm 150\text{ppm}/^{\circ}\text{C}$
- ✧ **RoHS Compliant**

### Outline Drawing (mm)

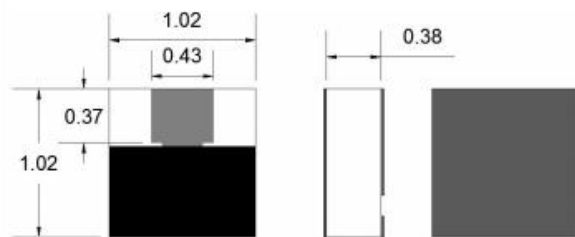


**Part Number: ST50N-5-301A**

### Electrical Specifications

- ✧ **Nominal Impedance:** 50  $\Omega$
- ✧ **Resistive Tolerance:**  $\pm 5\%$  standard
- ✧ **Substrate Material:** AlN
- ✧ **Power Rating:** 5W
- ✧ **Frequency Range:** DC-42.5GHz
- ✧ **VSWR:**  $\leq 1.50:1$
- ✧ **Operating Temperature:**  $-55^{\circ}\text{C}$  to  $+150^{\circ}\text{C}$
- ✧ **Temperature Coefficient:**  $\pm 150\text{ppm}/^{\circ}\text{C}$
- ✧ **RoHS Compliant**

### Outline Drawing (mm)

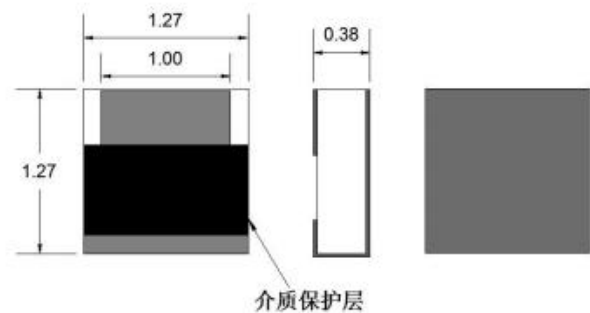


**Part Number: ST50-6-301A**

### Electrical Specifications

- ✧ **Nominal Impedance:** 50  $\Omega$
- ✧ **Resistive Tolerance:**  $\pm 5\%$  standard
- ✧ **Substrate Material:** BeO
- ✧ **Power Rating:** 6W
- ✧ **Frequency Range:** DC-18GHz
- ✧ **VSWR:**  $\leq 1.30:1$
- ✧ **Operating Temperature:**  $-55^{\circ}\text{C}$  to  $+150^{\circ}\text{C}$
- ✧ **Temperature Coefficient:**  $\pm 150\text{ppm}/^{\circ}\text{C}$

### Outline Drawing (mm)



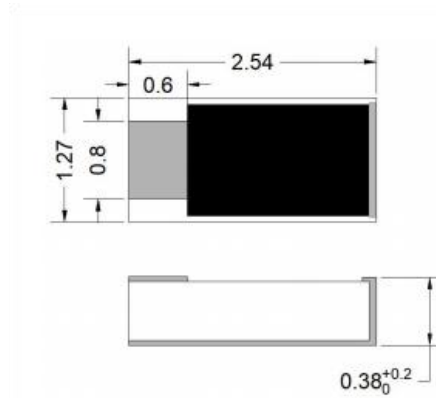
## Surface Mount Terminations

**Part Number: ST50-10-710A**

### Electrical Specifications

- ✧ **Nominal Impedance:** 50  $\Omega$
- ✧ **Resistive Tolerance:**  $\pm 5\%$  standard
- ✧ **Substrate Material:** BeO
- ✧ **Power Rating:** 10W
- ✧ **Frequency Range:** DC-18GHz
- ✧ **VSWR:**  $\leq 1.35:1$
- ✧ **Operating Temperature:**  $-55^{\circ}\text{C}$  to  $+150^{\circ}\text{C}$
- ✧ **Temperature Coefficient:**  $\pm 150\text{ppm}/^{\circ}\text{C}$

### Outline Drawing (mm)

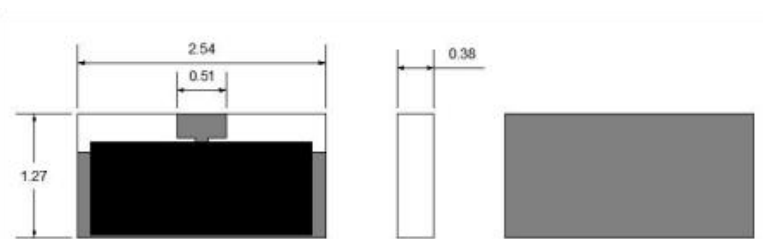


**Part Number: ST50N-12-701A**

### Electrical Specifications

- ✧ **Nominal Impedance:** 50  $\Omega$
- ✧ **Resistive Tolerance:**  $\pm 5\%$  standard
- ✧ **Substrate Material:** AlN
- ✧ **Power Rating:** 12W
- ✧ **Frequency Range:** DC-18GHz
- ✧ **VSWR:**  $\leq 1.20:1$
- ✧ **Operating Temperature:**  $-55^{\circ}\text{C}$  to  $+150^{\circ}\text{C}$
- ✧ **Temperature Coefficient:**  $\pm 150\text{ppm}/^{\circ}\text{C}$
- ✧ **RoHS Compliant**

### Outline Drawing (mm)

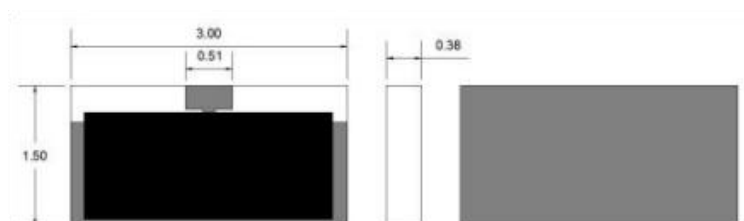


**Part Number: ST50N-15-801A**

### Electrical Specifications

- ✧ **Nominal Impedance:** 50  $\Omega$
- ✧ **Resistive Tolerance:**  $\pm 5\%$  standard
- ✧ **Substrate Material:** AlN
- ✧ **Power Rating:** 15W
- ✧ **Frequency Range:** DC-18GHz
- ✧ **VSWR:**  $\leq 1.20:1$
- ✧ **Operating Temperature:**  $-55^{\circ}\text{C}$  to  $+150^{\circ}\text{C}$
- ✧ **Temperature Coefficient:**  $\pm 150\text{ppm}/^{\circ}\text{C}$
- ✧ **RoHS Compliant**

### Outline Drawing (mm)



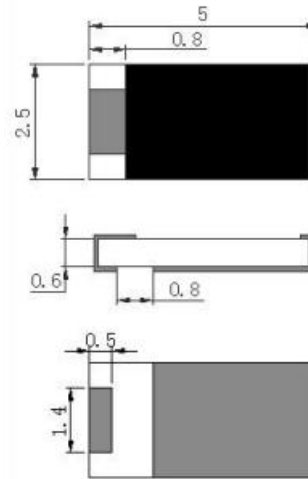
## Surface Mount Terminations

**Part Number: ST50-20-421B**

### Electrical Specifications

- ✧ **Nominal Impedance:** 50  $\Omega$
- ✧ **Resistive Tolerance:**  $\pm 5\%$  standard
- ✧ **Substrate Material:** BeO
- ✧ **Power Rating:** 20W
- ✧ **Frequency Range:** DC-6GHz
- ✧ **VSWR:**  $\leq 1.20:1$
- ✧ **Operating Temperature:**  $-55^{\circ}\text{C}$  to  $+150^{\circ}\text{C}$
- ✧ **Temperature Coefficient:**  $\pm 150\text{ppm}/^{\circ}\text{C}$

### Outline Drawing (mm)

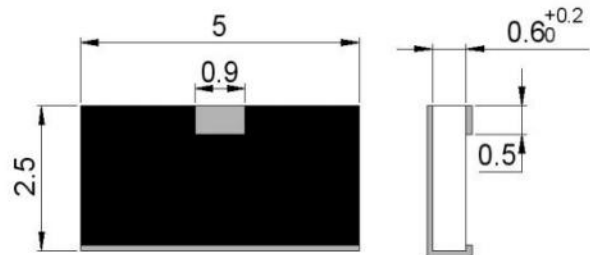


**Part Number: ST50-30-406A**

### Electrical Specifications

- ✧ **Nominal Impedance:** 50  $\Omega$
- ✧ **Resistive Tolerance:**  $\pm 5\%$  standard
- ✧ **Substrate Material:** BeO
- ✧ **Power Rating:** 30W
- ✧ **Frequency Range:** DC-18GHz
- ✧ **VSWR:**  $\leq 1.20:1$
- ✧ **Operating Temperature:**  $-55^{\circ}\text{C}$  to  $+150^{\circ}\text{C}$
- ✧ **Temperature Coefficient:**  $\pm 150\text{ppm}/^{\circ}\text{C}$

### Outline Drawing (mm)

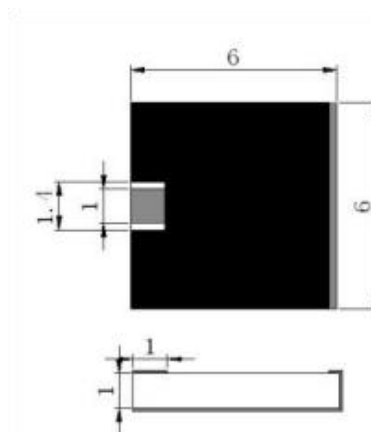


**Part Number: ST50-60-106A**

### Electrical Specifications

- ✧ **Nominal Impedance:** 50  $\Omega$
- ✧ **Resistive Tolerance:**  $\pm 5\%$  standard
- ✧ **Substrate Material:** BeO
- ✧ **Power Rating:** 60W
- ✧ **Frequency Range:** DC-6GHz
- ✧ **VSWR:**  $\leq 1.25:1$
- ✧ **Operating Temperature:**  $-55^{\circ}\text{C}$  to  $+150^{\circ}\text{C}$
- ✧ **Temperature Coefficient:**  $\pm 150\text{ppm}/^{\circ}\text{C}$

### Outline Drawing (mm)



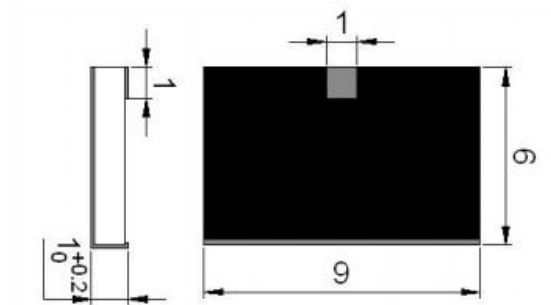
## Surface Mount Terminations

**Part Number: ST50-100-201A**

### Electrical Specifications

- ✧ **Nominal Impedance:** 50  $\Omega$
- ✧ **Resistive Tolerance:**  $\pm 5\%$  standard
- ✧ **Substrate Material:** BeO
- ✧ **Power Rating:** 100W
- ✧ **Frequency Range:** DC-6GHz
- ✧ **VSWR:**  $\leq 1.25:1$
- ✧ **Operating Temperature:**  $-55^{\circ}\text{C}$  to  $+150^{\circ}\text{C}$
- ✧ **Temperature Coefficient:**  $\pm 150\text{ppm}/^{\circ}\text{C}$

### Outline Drawing (mm)

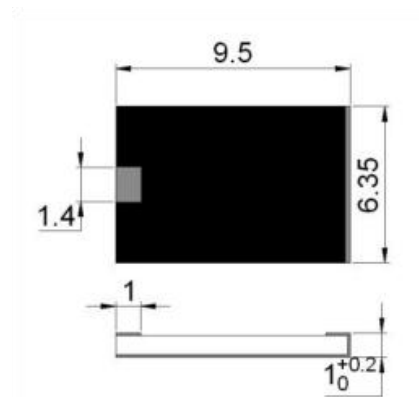


**Part Number: ST50-150-301A**

### Electrical Specifications

- ✧ **Nominal Impedance:** 50  $\Omega$
- ✧ **Resistive Tolerance:**  $\pm 5\%$  standard
- ✧ **Substrate Material:** BeO
- ✧ **Power Rating:** 150W
- ✧ **Frequency Range:** DC-3GHz
- ✧ **VSWR:**  $\leq 1.20:1$
- ✧ **Operating Temperature:**  $-55^{\circ}\text{C}$  to  $+150^{\circ}\text{C}$
- ✧ **Temperature Coefficient:**  $\pm 150\text{ppm}/^{\circ}\text{C}$

### Outline Drawing (mm)

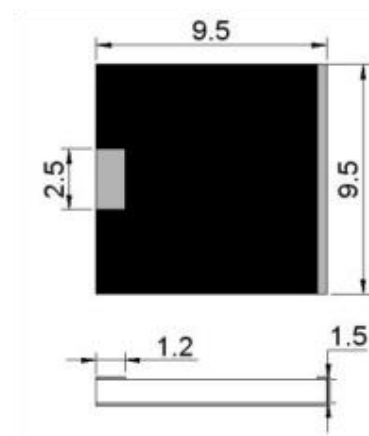


**Part Number: ST50-250-025A**

### Electrical Specifications

- ✧ **Nominal Impedance:** 50  $\Omega$
- ✧ **Resistive Tolerance:**  $\pm 5\%$  standard
- ✧ **Substrate Material:** BeO
- ✧ **Power Rating:** 250W
- ✧ **Frequency Range:** DC-3.5GHz
- ✧ **VSWR:**  $\leq 1.20:1$
- ✧ **Operating Temperature:**  $-55^{\circ}\text{C}$  to  $+150^{\circ}\text{C}$
- ✧ **Temperature Coefficient:**  $\pm 150\text{ppm}/^{\circ}\text{C}$

### Outline Drawing (mm)



### Surface Mount Terminations

Part Number: ST50-500-726A

#### Electrical Specifications

- ✧ **Nominal Impedance:** 50  $\Omega$
- ✧ **Resistive Tolerance:**  $\pm 5\%$  standard
- ✧ **Substrate Material:** BeO
- ✧ **Power Rating:** 500W
- ✧ **Frequency Range:** DC-1GHz
- ✧ **VSWR:**  $\leq 1.25:1$
- ✧ **Operating Temperature:**  $-55^{\circ}\text{C}$  to  $+150^{\circ}\text{C}$
- ✧ **Temperature Coefficient:**  $\pm 150\text{ppm}/^{\circ}\text{C}$

#### Outline Drawing (mm)

