	<b>DATASHEET</b>	<b>Part No.</b>
	<b>Amotech Broadband Capacitor</b>	<b>ABCUA06F0XX104MNDG</b>

CUSTOMER :

# DATA SHEET

**Product Name** : Amotech Broadband Capacitor

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**Part No** : ABCUA06F0XX104MNDG


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**Revision Date** : 2020/12/08

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**Customer Code** :

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## 1. Parts description

### 1.1. Overview

The ABCU series is abbreviation of Amotech broadband Capacitor. We provide extremely low insertion loss and excellent return loss in 40GHz.

### 1.2. Features

- 01005 inch (0.4x0.2mm)
- Operating Frequency : 16kHz ~ 40GHz +
- Low insertion loss
- RoHS Compliant

### 1.3. Application

- Broadband Microwave / millimeter-wave
- Broadband Test Equipment
- Optoelectronics / High Speed Data for optical module

## 2. Model and Lot Number description

### 2.1. Model

<b>ABC</b>	<b>U</b>	<b>A</b>	<b>06</b>	<b>F</b>	<b>0XX</b>	<b>104</b>	<b>M</b>	<b>N</b>	<b>D</b>	<b>G</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>	<b>(7)</b>	<b>(8)</b>	<b>(9)</b>	<b>(10)</b>	<b>(11)</b>

- (1) Series name
- (2) Design code
- (3) Internal code
- (4) Rated Voltage 06 : 6.3V
- (5) Material Code F : internal code
- (6) Chip size, 0XX : 01005inch (0.4x0.2x0.2 mm)
- (7) Capacitance 104 : 100nF
- (8) Capacitance tolerance M : ±20%
- (9) Plating N : Sn plating over Ni barrier
- (10) Packaging specification : Paper Taping (ø180mm Reel)
- (11) Application G : General

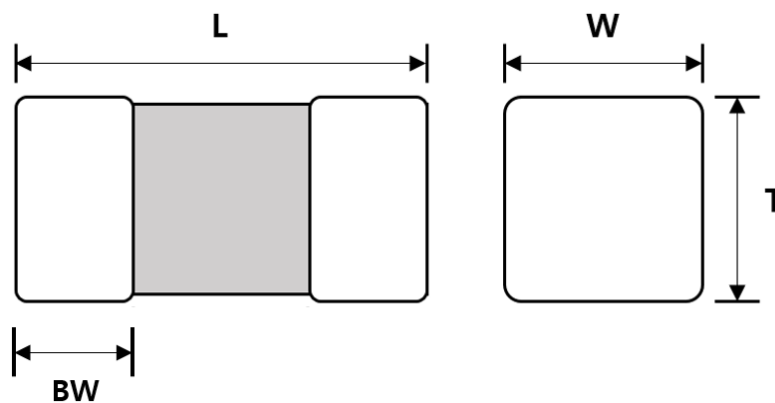
### 3. Specifications

#### 3.1 Electrical characteristics

<b>Part number</b>	ABCUA06F0XX104MNDG
<b>DC Rated voltage</b>	6.3 V dc
<b>Capacitance &amp; Tolerance</b>	100nF (±20%)
<b>Dielectric Withstanding Voltage</b>	250% of rated voltage for 5sec.
<b>Insulation Resistance</b>	10 <sup>9</sup> Ω min. @+25°C, DC rated voltage
<b>Temperature Coefficient of Capacitance (TCC)</b>	15 % @ -55 ~ +85°C
<b>Typical operating frequency range</b>	16 kHz (-3dB point) to 40 GHz +

#### 3.2 Mechanical dimension

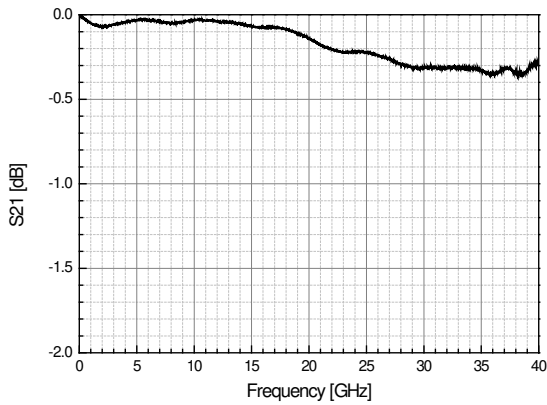
■ Mechanical dimension



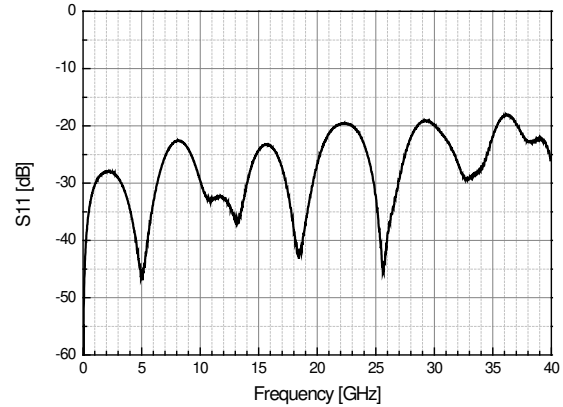
	L	W	T	BW
Size (mm)	0.40 ±0.02	0.20 ±0.02	0.20 ±0.02	0.11 ±0.04

**3.3. Typical performance data**

■ **Insertion Loss (S21)**

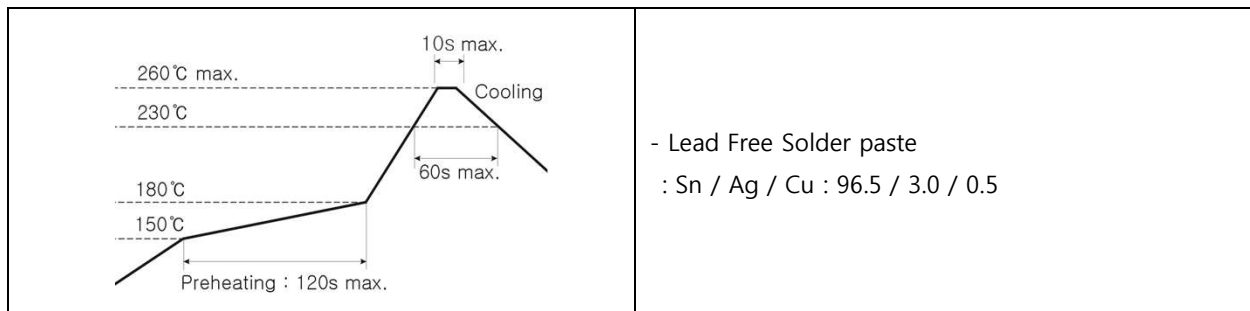


■ **Return Loss (S11)**



\* EV board (ABC 0XX E01): Rogers 4350B, thickness : 0.1 mm

**4. Soldering condition (Reflow soldering)**



Follow the recommended soldering conditions to avoid degradation of performance .

- This product is designed for reflow soldering only. Do not use flow soldering.
- Use non-activated flux. (Max. Cl content less than 0.2%)
- Reflow cycle times should be done less than 3 times.

**5. Caution**

- 1) Storage environment: 5~40°C temperature, 20~70% humidity (MSL Level 1)
- 2) Do not use in high temperature/high humidity and a corrosive atmosphere like sulfide, chloride gas, which could damage the solderability.
- 3) Do not expose to mechanical shock to avoid crack.