

	DATASHEET	Part No.
	Amotech Feedthru capacitor coaXial type	AFX1BS10F102SPL (Preliminary)

CUSTOMER :

DATA SHEET

Product Name	: Amotech Feedthru capacitor coaxial type
Part No	: AFX 1BS 10F 102S PL
Revision Date	: 2019/11/04
Customer Code	:

	Address : AMOTECH. CO. LTD., 17-2 ,JAMWON-DONG, SEOCHO-GU, SEOUL,KOREA
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	Amotech Feedthru capacitor coaxial type	AFX1BS10F102SPL (Preliminary)

1. Parts description

1.1. Overview

The AFX series has a filter with Coaxial feed-thru structure for EMI protection, and mainly has the function of blocking EMI noise in power circuits.

1.2. Features

- Low ESL/ESR
- Broad band frequency characteristics
- Ceramic multilayer type SMD component
- RoHS compliance
- MSL LEVEL 1

1.3. Application

- EMI Suppression
- Broadband I/O Filtering
- Vcc Line Conditioning

2. Model and Lot Number description

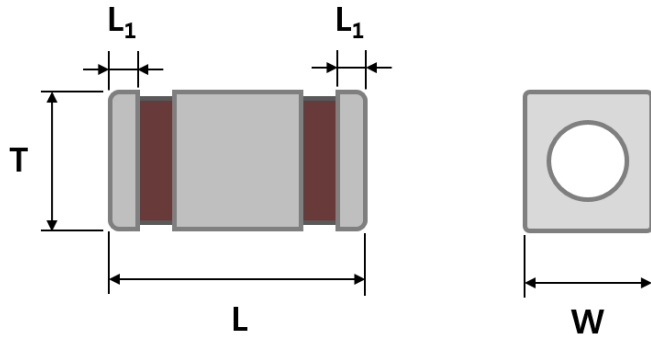
2.1. Model

AFX	1B	S	10F	102	S	P	L
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)

- (1) Series name
- (2) Rated Voltage 1B : 100V
- (3) Material Code S : X7R
- (4) Chip size, 10F : 1210 (3.2 x 2.5 x 2.5 mm)
- (5) Capacitance 102 : 1000pF (=1nF)
- (6) Capacitance tolerance : +50%, -20%
- (7) For large current
- (8) Packaging specification

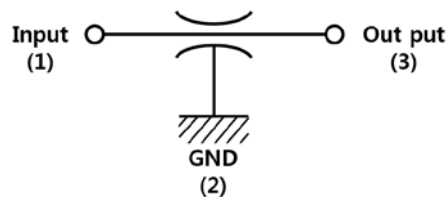
3. Style and Dimension

3.1. Appearance and dimension



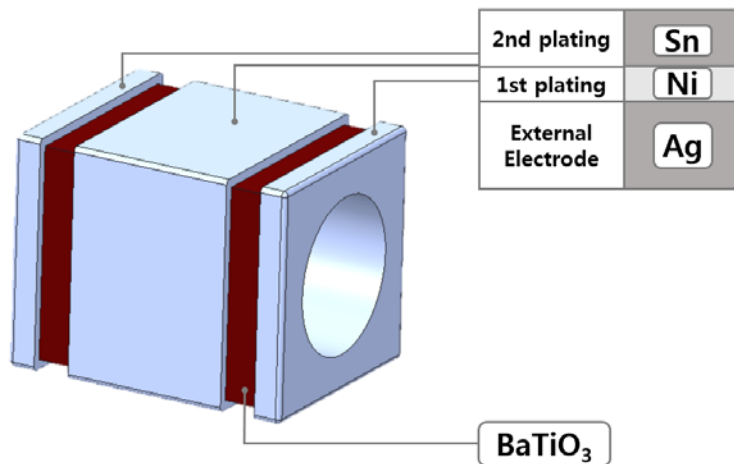
Size (mm)	
L	3.2±0.20
W	2.5±0.20
T	2.5±0.20
L ₁	0.3±0.20

3.2. Equivalent circuit



※ No Polarity & Directionality

4. Structure and materials

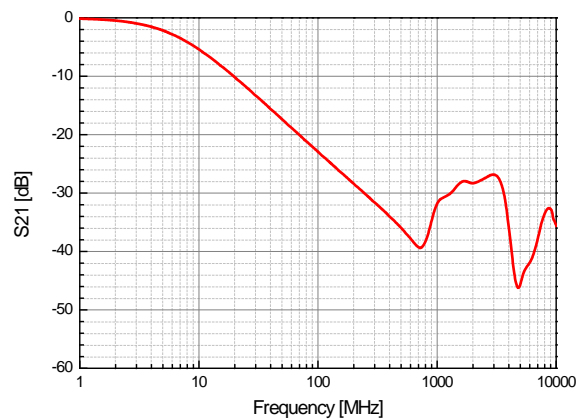


5. Specification

5.1. Electrical characteristics

Part No.	Capacitance	Tolerance	DC Rated Voltage	DC Rated Current	DC Resistance	Insulation Resistance
	(pF)	(%)	(V)	(A)	(mΩ)	(MΩ)
AFX 1BS 10F 102S PL	1000	+50, -20	100	20A(DC)	Max. 5	Min. 10000

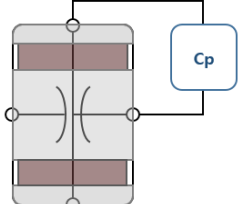
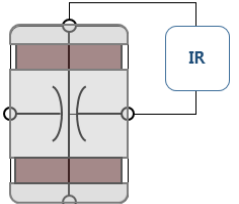
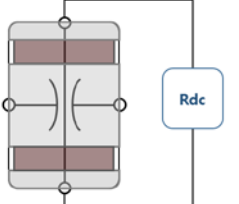
5.1.1. Frequency characteristics



5.2. Temperature range

- 1) Operating temperature range: -55 ~ +125°C
- 2) Storage temperature range: -55 ~ +125°C

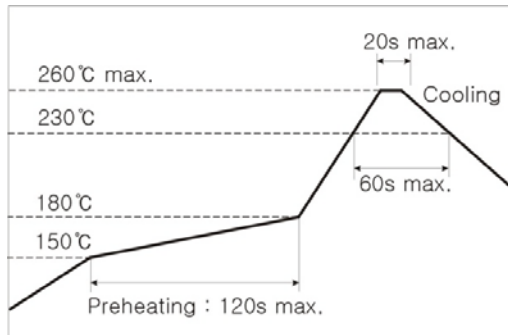
5.3. Testing method

parameter	Capacitance (Cp)	Insulation Resistance	DC Resistance
Equipment	Capacitance meter	Source meter	Milliohm Meter
Terminal to be Tested			

6. Soldering (Reflow soldering)

6.1. Soldering condition

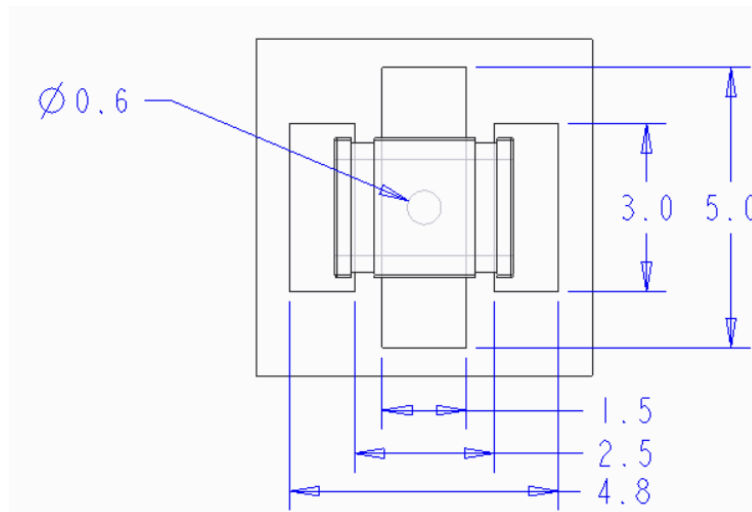
a. Lead-free solder paste: Sn/Ag/Cu:96.5/3.0/0.5



b. Follow the recommended soldering conditions to avoid degradation of performance.

- This product 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.

6.2. PCB pattern design condition (recommended)



7. 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.
- 4) Use chips within 6 months. If over 6 months, check solderability before use.