

➤ Description

BSMD2410CT series are the TIME-LAG fuses set the industry standard for performance, reliability and quality. Provide board level primary and secondary circuit protection in a wide variety of applications. With excellent inrush current withstanding capability, excellent reliability for thermal and mechanic shock, also have a high reliability and stable solder ability, end caps are available in gold/silver/nickel plated.

➤ Features

- Time-Lag
- RoHS compliant
- Conflict free metals
- Small size (0.24*0.10 inch/ 6.1*2.5mm)
- Wide range of current rating available
- Wide operating temperature range
- Low temperature de-rating

➤ Applications

- LED lighting
- LCD backlight inverter
- PC server
- Wireless base station
- Portable Devices
- Cooling fan system
- White goods
- Industrial equipment
- Battery devices
- Power supply
- Storage system
- Game console
- Medical equipment
- Networking devices
- Telecom system
- Office equipment

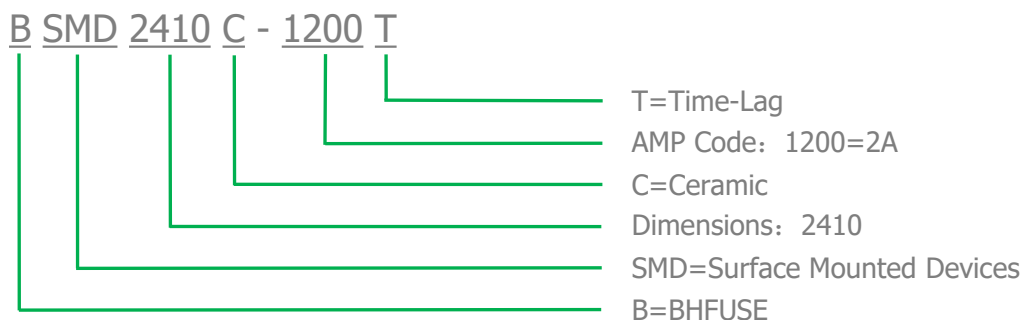
➤ Agency Approvals

AGENCY	AGENCY FILE NUMBER
UL	E544319

➤ Electrical Characteristics

% of Ampere Rating	Opening Time
100%	4 hours min.
200%	60 sec max.
1000%	10 ms min.

➤ Part Number System

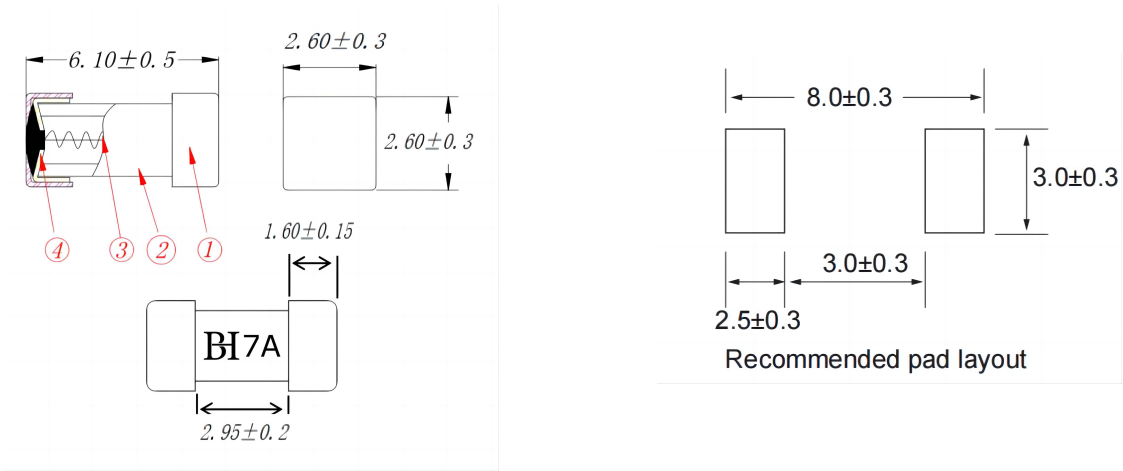


➤ Electrical Specifications

Part Number	Rated Current (A)	Rated Voltage (V)	Interrupting Rating	Typical Cold Resistance (mΩ)	Typical Melting I ² t (A ² sec)	Marking
BSMD2410C-0500T	0.500	125V 250V 300V 350V	100A@125V DC 100A@250V AC 100A@300V AC 100A@350V AC	350	0.063	BH500mA
BSMD2410C-0630T	0.630			280	0.71	BH630mA
BSMD2410C-0750T	0.750			210	1.80	BH750mA
BSMD2410C-1100T	1.000			170	3.30	BH1A
BSMD2410C-1125T	1.250			64	5.46	BH1.25A
BSMD2410C-1150T	1.500			45	7.50	BH1.5A
BSMD2410C-1200T	2.000			40	10.0	BH2A
BSMD2410C-1250T	2.500			25	19.3	BH2.5A
BSMD2410C-1300T	3.000			17	19.8	BH3A
BSMD2410C-1315T	3.150			16	34.7	BH3.15A
BSMD2410C-1400T	4.000			15	36.8	BH4A
BSMD2410C-1500T	5.000			10	72.5	BH5A
BSMD2410C-1630T	6.300			9	127	BH6.3A
BSMD2410C-1700T	7.000			7.5	158	BH7A
BSMD2410C-1800T	8.000			6.9	192	BH8A
BSMD2410C-2100T	10.00			4.2	240	BH10A
BSMD2410C-2120T	12.00			3.9	281	BH12A
BSMD2410C-2150T	15.00			3	562	BH15A
BSMD2410C-2160T	16.00			2.8	583	BH16A
BSMD2410C-2200T	20.00			2	760	BH20A
BSMD2410C-2250T	25.00			1.8	1187	BH25A
BSMD2410C-2300T	30.00			1.6	1620	BH30A
BSMD2410C-2400T	40.00			1.3	3000	BH40A

➤ **Dimensions**

Outline Drawing and dimensions (unit:mm)



➤ **Material Details**

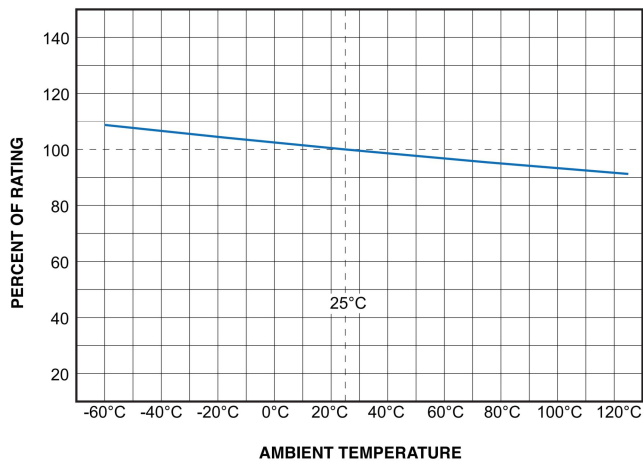
NO.	Part Name	Material
1	End Cap	Silver plated brass
2	Ceramic tube	Ceramic
3	Fuse element	Alloy
4	Solder	Solder wire (Sn5% Pb95%)

➤ **Product Characteristics**

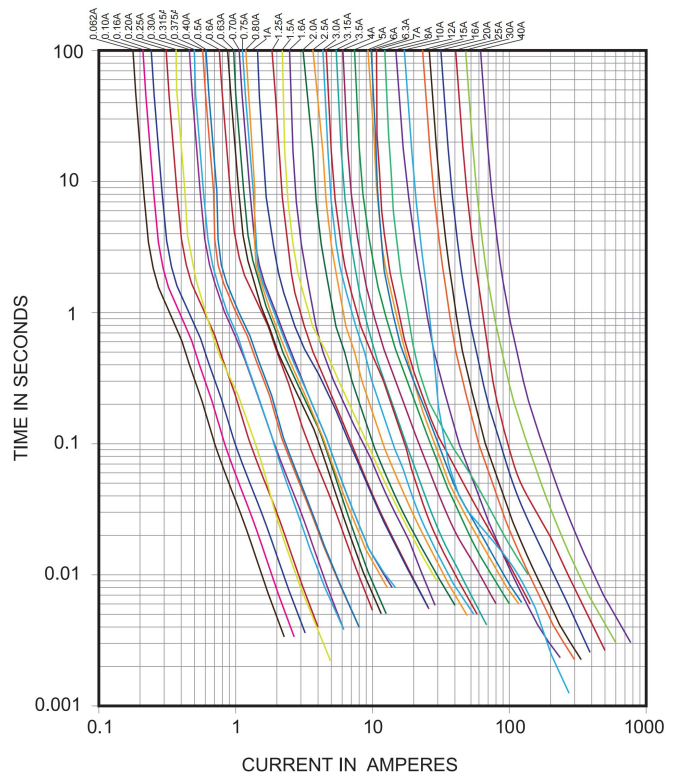
No.	Item	Contain	Reference Standard
1	Operating Temperature	-55°C to + 125°C	IEC60068-2-1/2
2	Solderability	T=240°C±5°C, t=5+0/-0.5s, Cover≥95%	MIL-STD-202G, Method 208H
3	Resistance to Soldering Heat	10 sec at 260°C	MIL-STD-202G, Method 210F, Test Condition B
4	Insulating Resistance (after Opening)	10,000 ohms min.	MIL-STD-202, Method 302, Test Condition A
5	Thermal Shock	5 cycles, -65°C to +125°C, 15minutes at each extreme	MIL-STD-202G, Method 107G, Test Condition B
6	Mechanical Shock	100G's peak for 6ms, 3cycles	MIL-STD-202G, Method 213B, Test Condition I
7	Vibration	0.03" amplitude, 10-55 Hz in 1 min. 2hrs each XYZ=6hrs	MIL-STD-202G, Method 201A
8	Moisture Resistance	10 cycles	MIL-STD-202G, Method 106G
9	Salt Spray	5% salt solution, 48hrs	MIL-STD-202G, Method 101E Test Condition B

➤ Environmental Characteristic

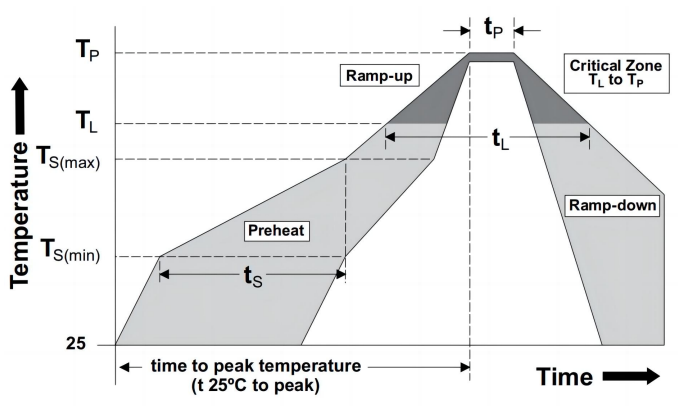
Temperature Derating Curve



Average Time-Current Curve



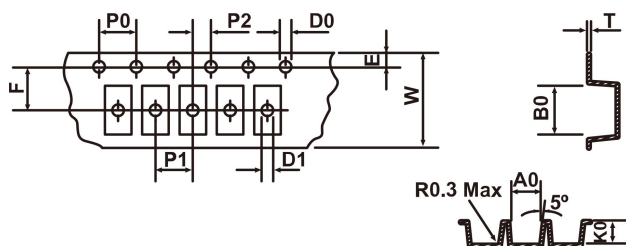
➤ Soldering Parameters



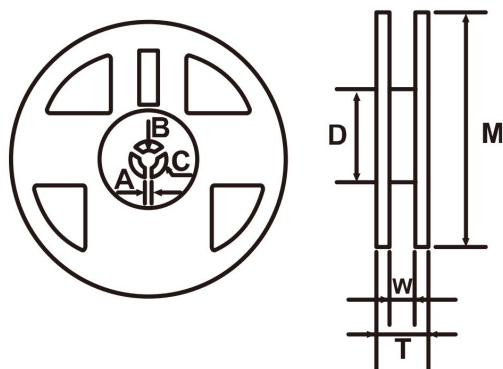
Soldering Method		Parameter
Reflow Solder	Solder Paste Process	
	Solder Pot Temperature	260°C max.
	Solder Dwell Time	5 sec max.
Hand Solder	Solder Iron Temperature	300±5°C max.
	Heating Time	1-2 sec max.

Profile Feature		Pb-Free Assembly
Average Ramp-Up Rate ($T_{S(max)}$ to T_P)		5°C/sec max.
Preheat	-Temperature Min($T_{S(min)}$)	150°C
	-Temperature Max($T_{S(max)}$)	200°C
	-Time($T_{S(min)}$ to $T_{S(max)}$)	60~120 sec
Reflow	-Temperature(T_L)	220°C
	-Time(t_L)	60 sec
Peak Temperature (T_P)		260°C
Ramp-Down Rate		5°C/sec max.
Time 25°C to Peak Temperature		8 min max.

➤ Tape And Reel Specifications (mm)



A0	2.70 ± 0.10	E	1.70 ± 0.10
B0	6.40 ± 0.10	F	5.50 ± 0.50
K0	2.70 ± 0.10	D0	$\Phi 1.65 \pm 0.10$
P0	4.00 ± 0.10	D1	1.50 ± 0.25
P1	4.00 ± 0.10	W	12.0 ± 0.30
P2	2.00 ± 0.10	T	0.25 ± 0.05



M	$\Phi 178.0 \pm 0.10$
W	12.5 ± 0.20
T	14.5 ± 0.20
A	2.2 ± 0.20
B	$\Phi 13.0 \pm 0.20$
C	$\Phi 21.0 \pm 0.20$
D	$\Phi 60.0 \pm 0.50$

➤ Packing

Part Number	Quantity & Packaging Code
BSMD2410CT Series	1500 pcs/reel 12mm tape-and-reel on a 7 inch (178mm) reel per EIA Standard 481

➤ Others

1. If in use beyond the requirements of the specifications, must pass through the mutual confirmation !
2. If the specification is not appropriate, must through consultation between the two sides and by the company to modify.
3. It could be in conformance with another file which made by our company.