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Innovative Service Around the Globe YAGEO

DATA SHEET

SMD 1206 SLOW BLOW FUSE

JB12S Series

RoHS compliant & Halogen free







Product specification– January 20, 2026 V.3

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REVISED RECORD SHEET

REV.#	PAGES	REV.DATE	REVICED CONTENT
A0	1-8	2022-09-05	Initial version
A1	P3;P10	2023-06-21	P10.add disclaimer.P3.revised typical DCR&I^2t .
A2	P3	2023-08-01	Add rated current 0.5A Spec.
A3	P3	2026-1-14	P3. Add S dimension

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JB12S Series DataSheet

Scope

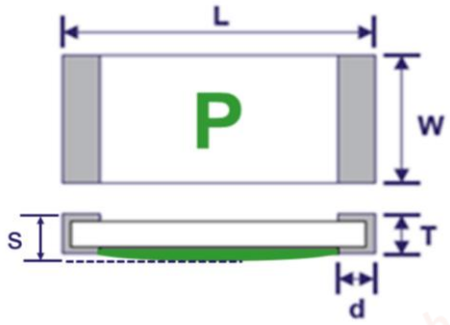
This specification is applicable to over-current protection thick film fuse for 1206 slow blow series produced by YAGEO corporation.

Applications

- LCD Displays
- Battery Packs
- Hard Disk Drives

Dimensions

Series	L (mm)	W (mm)	T (mm)	d (mm)	S (mm)
JB12S	3.20±0.20	1.60±0.20	0.65±0.20	0.50±0.20	0.75±0.20



Features

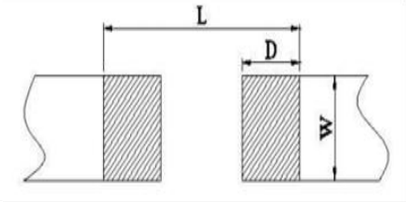
- Small Size,1206 SMD
- Operating temperature -55℃ to 125℃
- Excellent long-term stability
- Halogen Free
- Lead Free

Agency Approval

Agency	File Number	Ampere Range
cULus	E531845	0.63A-40A

Recommended Land Patterns

Series	L (mm)	W (mm)	D (mm)
JB12S	4.56	2.03	1.52



Ordering Information

Part Number	Current Rating (A)	Voltage Rating (Vdc)	Interrupting	Typical DCR (mΩ)[1]	Typical I^2t (A^2s)[2]	Marking
JB12S5000R	0.5A	63Vdc	50A@63Vdc	1150	0.03	0.5
JB12S6300R	0.63A			1080	0.035	B
JB12S7500R	0.75A			850	0.078	.75
JB12S1001R	1.0A			480	0.13	H
JB12S1501R	1.5A			230	0.32	K
JB12S2001R	2.0A			135	0.64	N
JB12S2501R	2.5A			75	1.28	O
JB12S3001R	3.0A			47	1.85	P
JB12S3501R	3.5A			38	2.23	R
JB12S4001R	4.0A			34	2.88	S
JB12S5001R	5.0A			24	5.16	T
JB12S6001R	6.0A			16	6.03	F
JB12S7001R	7.0A			12.3	7.24	7
JB12S8001R	8.0A			8.3	10.05	M
JB12S1002R	10A			6.5	18.20	U

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JB12S1202R	12A	48Vdc	200A@48Vdc	5	26.09	12
JB12S1502R	15A			3.7	30.56	15
JB12S2002R	20A			3.4	45.73	20
JB12S2502R	25A			1.6	69.31	25
JB12S3002R	30A			1.3	92	30
JB12S4002R	40A	36Vdc	200A@36Vdc	0.85	148	XL

NOTE:1. Measured at≤10% rated current and 25℃

2. Nominal Melting I2t measured at 0.001s opening time

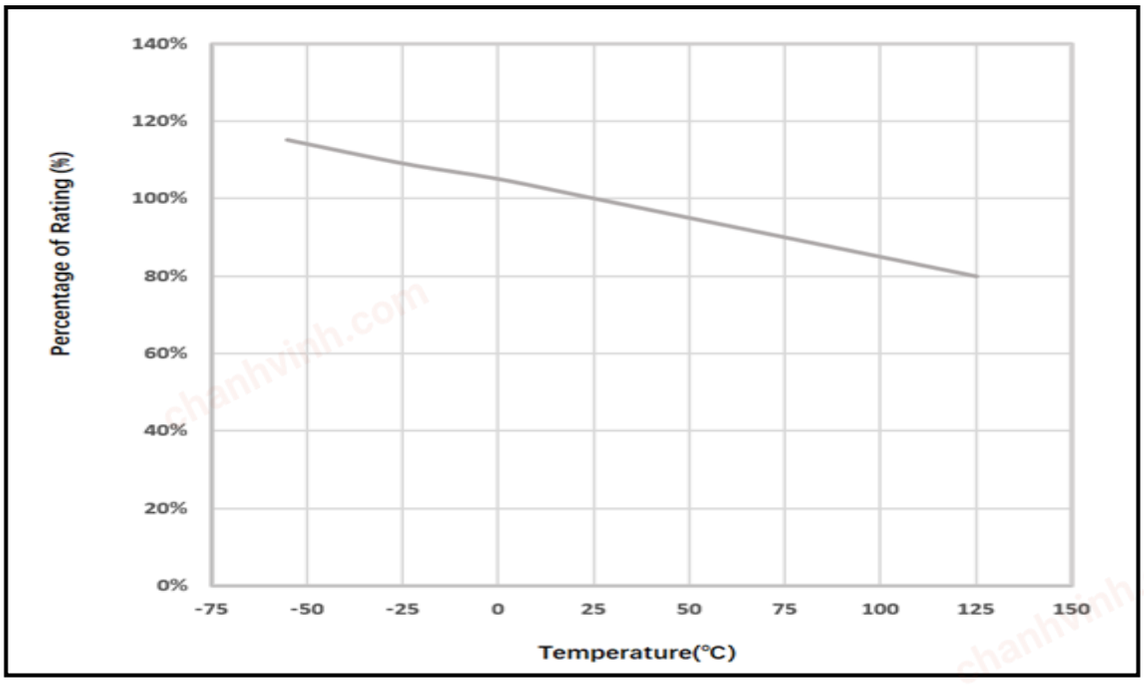
Clearing Time Characteristics

Rated Current	% of Current Rating	Clearing Time at 25℃	
		Min	Max
0.5A-40A	100%	4hours	/
	200%	1s	120s
	350%	/	3s

Part Number Code Rule

J	B	12	S	1001	R
Product Code	Product Type	Size Type	Fusing Type	Current Rating	Package
J:Fuse	B: Thick Film	12:1206	S: Slow Blow	6300:0.63A 1001:1A	R:Tape and Reel B:Bulk

Temperature Derating Curve



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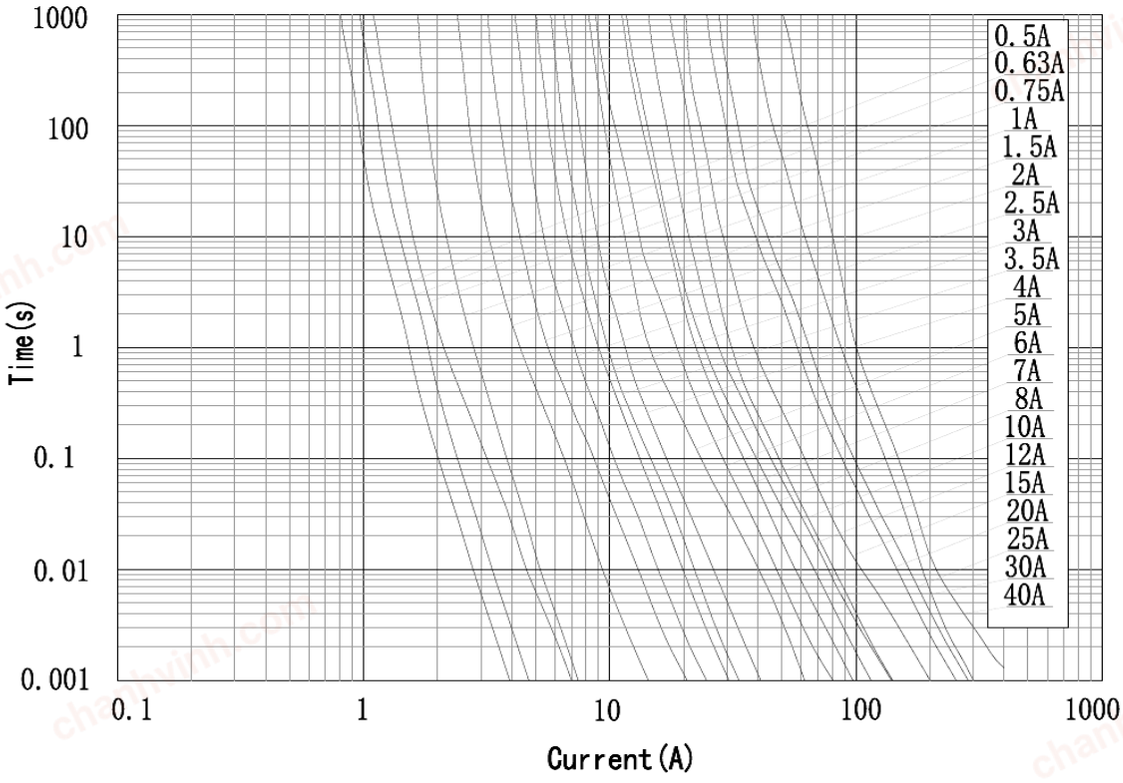
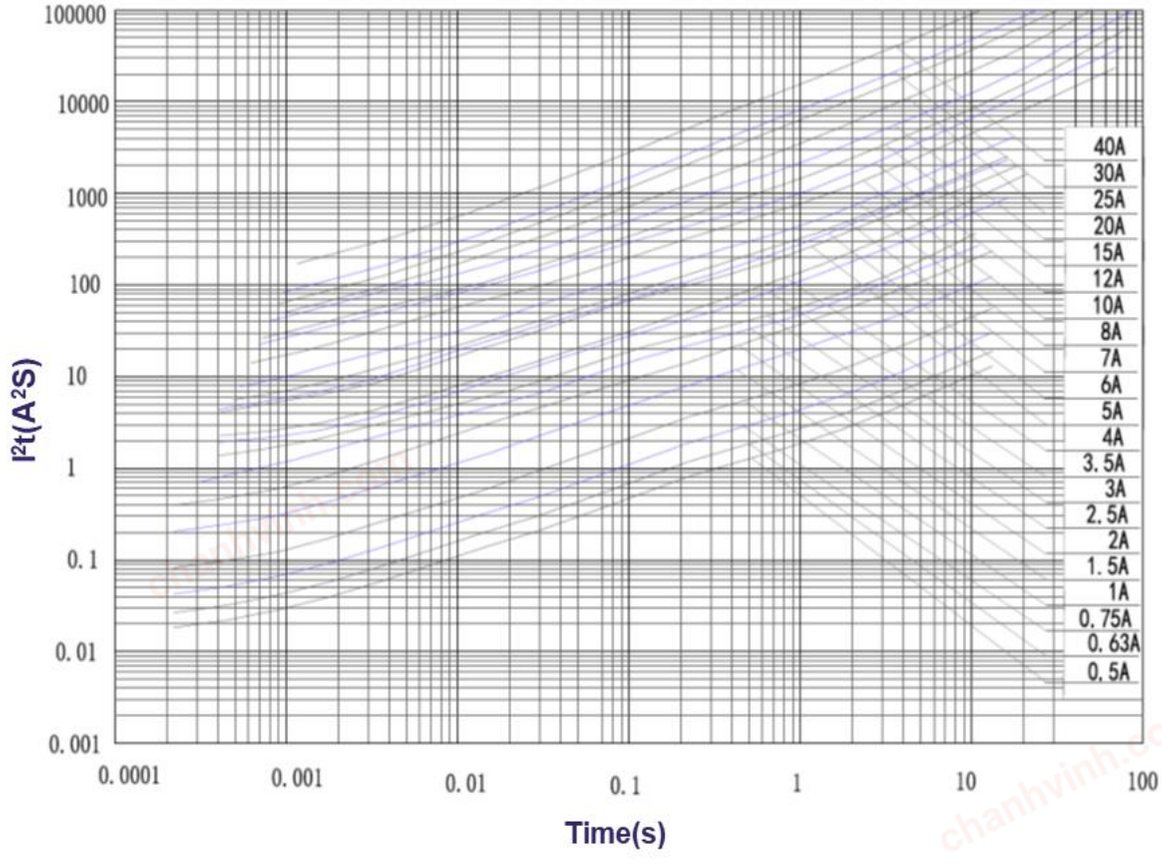
Time & Current Curve



I^2t & Time Curve



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Reliability Test Performance

Item	Test condition/ Methods	Performance	Standard
Time/Current Characteristics	100% Rated Current	No fusing within 4hr	UL248-14
	200% Rated Current	0.63A-40A：Min:1s；Max:120s	Refer to clearing time characteristics
	350% Rated Current	0.63A-40A：Max:3s	
Breaking Capacity	0.63A-10A: 50A@63Vdc 12A-30A: 200A@48Vdc 40A:200A@36Vdc	No a permanent arcing, ignition, bursting	UL248-14
Solderability	T=245℃±5℃，t=5s±0.5s	Cover ≧95%	MIL-STD-202 Method 208
Resistance to Soldering	Pre-heating:145°±15℃, max.120s Peak: 260°C, max.10s Reflow cycle: 2 times After immersion into solder, leaving the room temp. for 1h or more, and then measure the internal resistance.	△R<15% No crack and damage, Marking is easily legible	MIL-STD-202, Method 210F
Thermal Shock	-65℃,15min→25℃,5min→ +125℃,15min ; 100 cycles	△R<10% No crack and damage,	MIL-STD-202, Method 213B
Mechanical Shock	a=100G for 11ms, 5pulses	△R<10% No crack and damage	MIL-STD-202, Method 213B
Vibration	Frequency range:10~15~10Hz/min Vibration amplitude:1.5mm	△R<10% No mechanical damages	MIL-STD-202, Method 201A
Salt Spray	5% salt solution,48hr	△R<10% Legible appearance	MIL-STD-202, Method 101
Board Flex	Bending:1mm, time:60s	△R<15% No mechanical damages	IEC 60127-4

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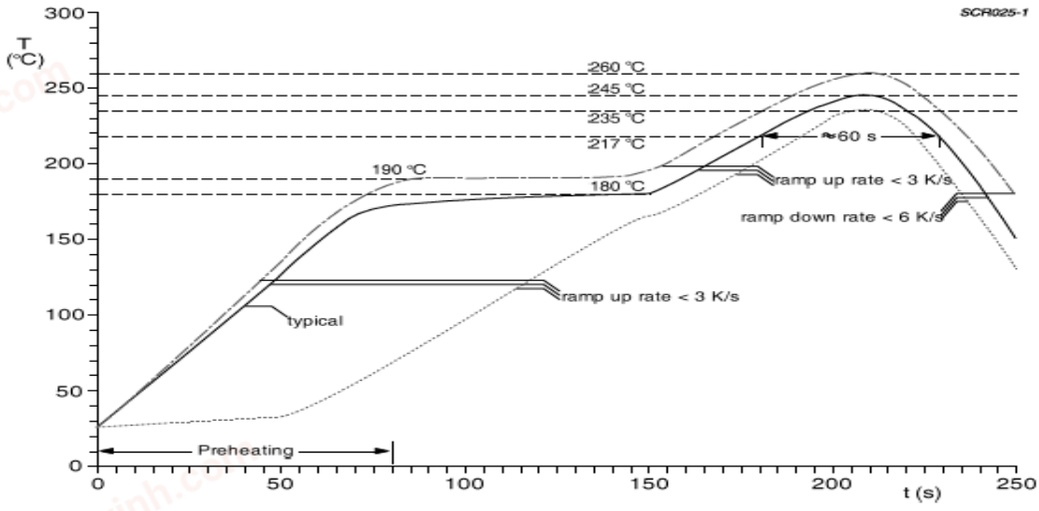
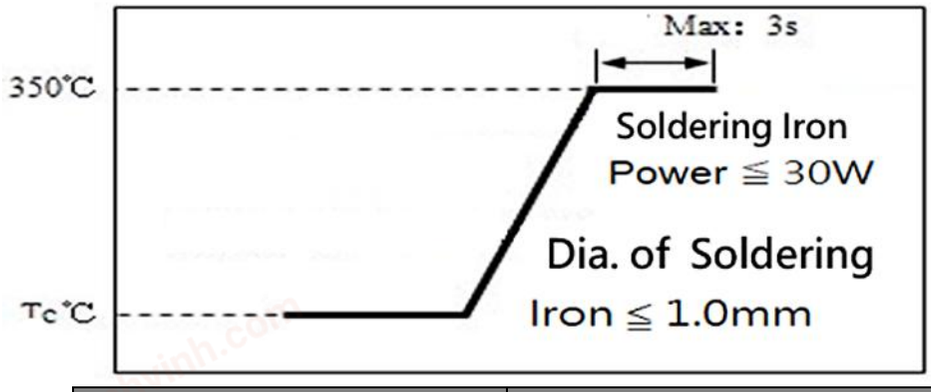
Soldering Condition

Recommend Re-Flowing Profile



Item	Condition
Ramp	<3° C/sec.
Pre-heating	145±15° C, 120s max.
Time above220° C	60s max.
Peak temperature	260° C/10s max.

Recommend Soldering tip Temperature



Item	Condition
Iron soldering power	Max. 30W
Pre-heating time	60sec, 150° C
Soldering tip temperature	Max. 350° C
Soldering time	Max. 3sec

Note: Take care not to apply the tip of the soldering iron to the terminal electrodes.

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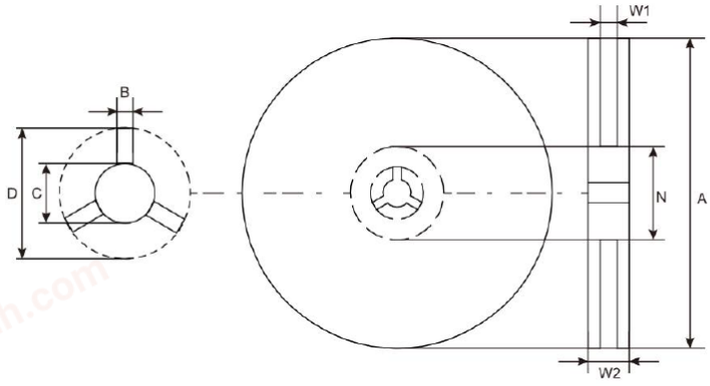
Packaging Specification

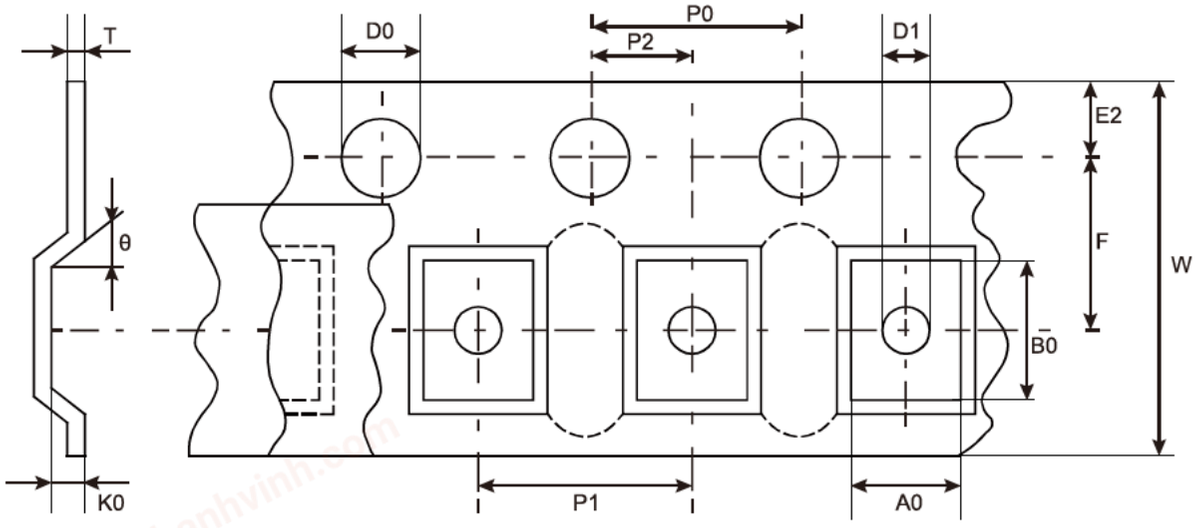
Quantity & Weight

Series	Quantity
JB12S	3000pcs/Reel

Reel & Tape Specification



Series	A (mm)	B (mm)	C (mm)	D (mm)	N (mm)	W1 (mm)	W2 (mm)
JB12S	178±5	1.6 Min.	12.8 Min.	20.8 Min.	58±2	8.4 Min.	12.4 Max.



Series	A0 (mm)	B0 (mm)	D0 (mm)	D1 (mm)	E2 (mm)	F (mm)	K0 (mm)
JB12S	1.92±0.10	3.62±0.10	$1.50^{+0.1}$	1.00 min.	1.75±0.10	3.50±0.05	0.87±0.10

P0 (mm)	P1 (mm)	P2 (mm)	T (mm)	W (mm)	θ (mm)
4.00±0.10	4.00±0.10	2.00±0.05	0.25±0.05	8.00±0.30	6^0 max.

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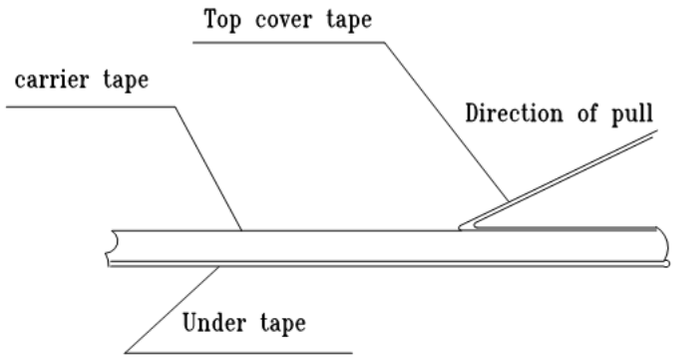
■ Peeling Strength of Seal Tape

The top cover tape is pulled at a speed of 300 mm/min with the angle between the tape during peel and the direction of unreeling maintained at 165 to 180 degree as following picture. The peel force of paper carrier tape shall be 0.1N to 0.7N(10 to 70 g)



Storage Conditions

- Storage Temperature: 10ºC~+40ºC
- Relative Humidity: ≤75%RH
- Keep away from corrosive atmosphere and sunlight.
- Period of Storage: 2 year.

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