Specification for approval

Product Type: BMF(3263) Series Specification

Fast-Acting ***Surface Mount Fuse 1000V-32V***

ELEKTRONIK s.r.o.
www.atd-elektronik.cz
info@atd-elektronik.cz

RoHS Compliance REACH Compliance Halogen Free

1. Descriptions:

R 3263 series Fast-Acting square Surface Mount fuses are ceramic tube/end cap constructions, RoHS compliant, Halogen Free and lead(Pb) exempts of the requirements of RoHS Directive(2002/95/EC), with U.S. (UL/CSA) safety agency approvals. 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:

- Fast-Acting (Fast-Acting)
- Wide range of current rating available
- Low temperature de-rating
- Tape and Reel for automatic placement
- Small size(32mm*6.03.mm)
- Wide operating temperature range
- RoHS compliant
- Conflict free metals

Applications:

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

2. Standards and Agency Approvals

Standards: In accordance with UL 248-14.

2.2 Certification:

Agency	Ampere Range	Agency File Number
UL	200mA ~ 60A	E340427(JDYX2)
cUL	200mA ~ 60A	E340427(JDYX8)

2.3 Catalogue No.， ● Approved / ○ Pending

Catalog No.	Ampere Rating	Voltage Rating			Breaking Capacity	Agency Approvals	
						ᴿᵁ	ᶜᴿᵁ
BMF3263.0.2	200mA	1000V/800V/750V/600V500V/400V/350V/300V/250V/125V/80V/72V63V/32VDC	250V/125V/ AC/DC	1000V/800V/750V/600V500V/400V/350V300V AC/DC	10KA/@300V350V 400V500V 600V750V800V1000V AC/DC 1.5KA@125V/250V 1KA@250V300V350V 400V500V AC/DC 1KA@32V DC63V72V80V	●	●
BMF3263.0.25	250mA					●	●
BMF3263.0.3	300mA					●	●
BMF3263.0.315	315mA					●	●
BMF3263.0.375	375mA					●	●
BMF3263.0.5	500mA					●	●
BMF3263.0.63	630mA					●	●
BMF3263.0.8	800mA					●	●
BMF3263.1	1A					●	●
BMF3263.1.25	1.25A					●	●
BMF3263.1.5	1.5A					●	●
BMF3263.1.6	1.6A					●	●
BMF3263.2	2A					●	●
BMF3263.2.5	2.5A					●	●
BMF3263.3	3A					●	●
BMF3263.3.15	3.15A					●	●
BMF3263.3.5	3.5A					●	●
BMF3263.4	4A					●	●
BMF3263.5	5A					●	●
BMF3263.6	6A					●	●
BMF3263.7	7A					●	●
BMF3263.8	8A					●	●
BMF3263.10	10A					●	●
BMF3263.12	12A					●	●
BMF3263.15	15A					●	
BMF3263.16	16A					●	
BMF3263.20	20A					●	
BMF3263.25	25A					●	●
BMF3263.30	30A					●	
BMF3263.35	35A	80V/72V 63V/32V DC				●	●
BMF3263.40	40A					●	●
BMF3263.50	50A					●	
BMF3263.60	60A					●	●

- *: These catalog no. cold resistance and I2t value are pending due to fuse elements shall be customized;
- DC Cold Resistance are measured at <10% of rated current in ambient temperature of 25℃;
- Typical Pre-arching I2t are calculated at 10*In Current or 8ms;

- Min Interrupting Rating: 1.35*In.

3. Product Marking

The fuses shall have the following markings示例 Example:

	BMF	_A	cULus
③	②	③	④

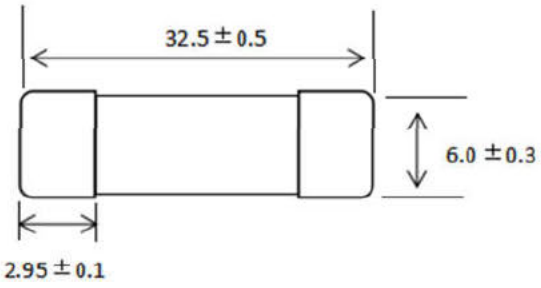
①	Trade Mark:
②	Series Type Name: **BMF**
③	Rated Current (A): ___**A** or ___**mA**
④	Approval Marks: cULus

Note: Size and position of the markings shall not be provided.

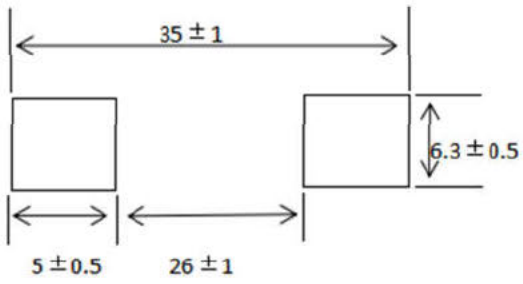
4. Dimensions and Structure

Unit: mm

Dimensions and Structure (*Unit: mm*)



Recommended pad layout



5. Material Details

NO.	Part Name	Material
①	End caps	Au Plated Brass Cap
②	Body	Non-Transparent Square Ceramic Tube
③	Fuse element	Cu-Ag Alloy wire

6. Product Characteristics

NO.	Item	Content	Reference standards
1	Product Marking	Brand, Ampere Rating	marking standards
2	Operating Temperature	-55°C to 125°C	–55°C to 125°C with proper derating
3	Solderability	T=240°C±5°C , t=3sec±0.5sec, Coverage≥95%	MIL-STD-202, Method 208
4	Resistance to Soldering Heat	10 sec at 260°C	MIL-STD-202, Method 210, Test condition B
5	Insulation Resistance (after Opening)	10,000 ohms minimum	MIL-STD-202, Method 302, Test Condition A
6	Thermal Shock	5 cycles, -65°C / +125°C, 15 minutes at each extreme	MIL-STD-202, Method 107, Test Condition B
7	Mechanical Shock	100G's peak for 6 milliseconds, 3cycles	MIL-STD-202, Method 213, Test I
8	Vibration	0.03"amplitude, 10-55 Hz in 1 min. 2hrs each XYZ=6hrs	MIL-STD-202, Method 201
9	Moisture Resistance	10 cycles	MIL-STD-202, Method 106
10	Salt Spray	5% salt solution, 48hrs	MIL-STD-202, Method 101, Test Condition B

7. Electrical Characteristics

7.1 ： Test Condition

All electrical test is to be conducted with the ambient air at a temperature of 25±5℃.

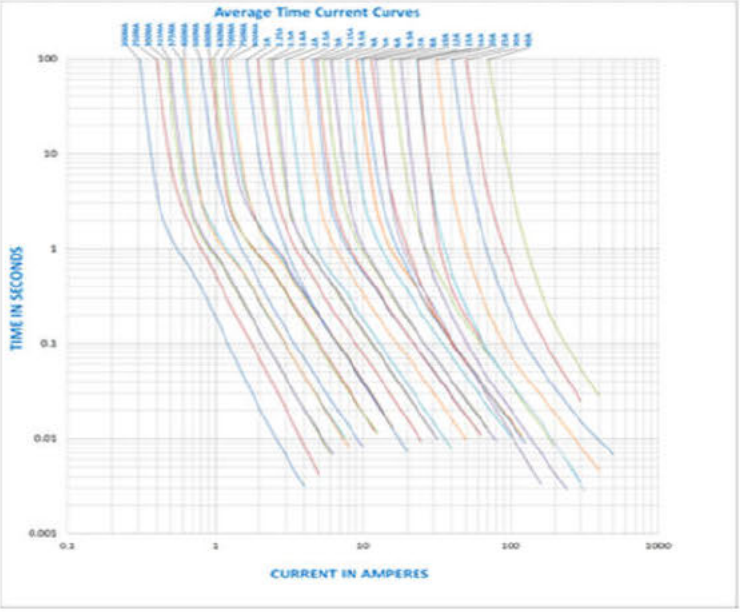
7.2 Interrupting Rating：

Breaking Capacity: 10KA/@300V350V400V500V600V750V800V1000V AC/DC 1.5KA@125V/250V
1KA@250V300V350V400V500VAC/DC1KA@32V DC63V72V80V

7.3 Operating Characteristics

% of Ampere Rating(In)	Blowing Time
100% * In	4 hours Min
200% * In	120 sec Max

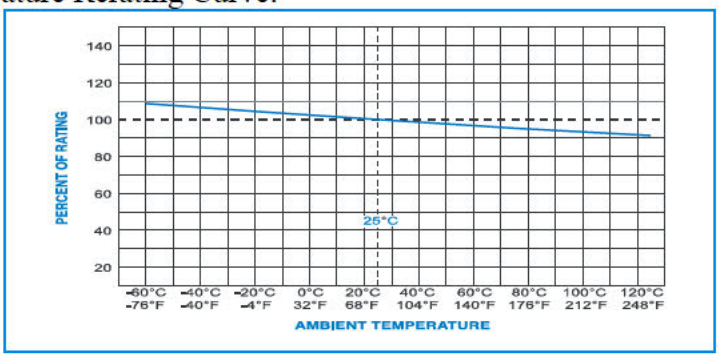
7.4 Average Time Current Curves



7. Environmental Characteristic

When choosing the fuse's specification, if the operating environmental temperature beyond the scope from 20~30℃, engineer should consider the environmental temperature's affection to fuses.

Please refer: Temperature Rerating Curve:



8. Recommended Soldering Parameters

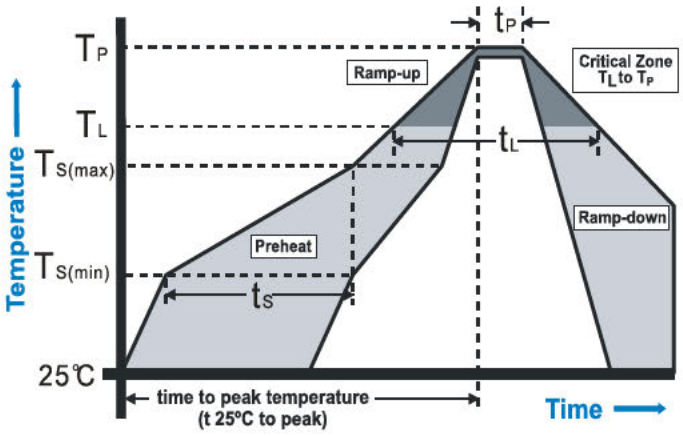
A. Wave /Reflow Soldering Parameters:

older paste process.

Solder Pot Temperature: 260°C Max

Solder Dwell Time: 5 seconds max

Reflow Condition		Pb-Free assembly
Average ramp-up rate (Ts(max)to Tp)		5°C /second max.
Preheat	Temperature Min (Ts(min))	150°C
	Temperature Max (Ts(max))	200°C
	Time (Min to Max) (ts)	60-120 seconds
Reflow	Temperature (T_L)	220°C
	Time Max (t_L)	60 seconds
Peak Temperature(Tp)		260°C max
Ramp-down Rate		5°C/second max
Time 25°C to peak Temperature (Tp)		8 minutes max



B. Hand-Solder Parameters:

Solder Iron Temperature: 300±5℃

Heating Time: 1~2 s Max

9. Packaging

1000/1500/2000PCS

10. Others

In the event that an impropriety is found beyond this specification, it shall be fixed by mutual agreement between the parties.

Appendix I: Safety approval certificates

UL Product iQ™

JDYX2.E340427 - FUSES, SUPPLEMENTAL - COMPONENT

Fuses, Supplemental - Component

ELEKTRONIK s.r.o.
www.atd-elektronik.cz
info@atd-elektronik.cz