NEW

CHIP FUSES; RECTANGULAR TYPE **KAMAYA OHM**

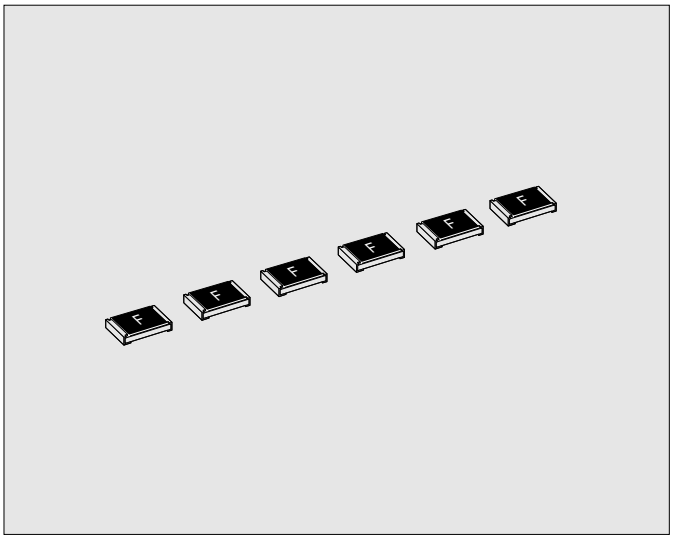
FMC/Low Ohm & Fast Acting

●Features

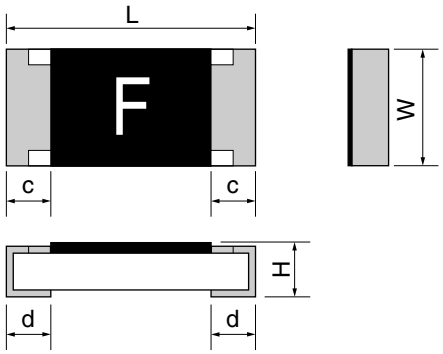
1. Suitable for over-current protection of the circuit of miniature portable equipment.
2. Low internal resistance compared with FCC/FHC16 AB series for low power consumption and voltage dropping.
3. Certified UL, c-UL.
   ·File No. : E176847

c UL us

4.Major application
- •PC related equipment and peripherals (PC, Hard Drive, Printer etc.).
- •Small portable devices (Mobile phone, PDA Battery Charger etc.).
- •Digital Camera (Digital still camera).
- •Game equipment.
- •LCD monitors, LCD modules.
- •Battery pack.



●Dimension



Current value is marked on the cover coating.
Please refer to Ratings table on next page.

Unit : mm

Style	Metric	Inch	L	W	H	c	d	*Unit weight/pc.
FMC16	**1608**	**0603**	1.6±0.1	$0.8^{+0.15}_{-0.05}$	0.45±0.10	0.3±0.15	0.3±0.1	2mg

*Values for reference

●Part Number Description

Example

Style: FMC | 16 | 252 | AB | TP

Product Type
FMC

Size		
Code	Metric	Inch
16	1608	0603

Rated Current	
e.g. :102=1.0A 132=1.25A 252=2.5A	3digit

Option Code	
Code	Clearing Time
AB	Rated Current×200% 5s max.

* Packing & Standard Qty. (Min.)		
B	Bulk (Loose Package)	1,000pcs.
TP	Paper Tape	5,000pcs.

*Refer to Tape and Packaging information on pages 48 and 49.

NEW CHIP FUSES; RECTANGULAR TYPE FMC

●Ratings/Option Code : AB (Fast-Acting type)

Size		Style	Rated Current		Internal Resistance m ohm max.	Mark	Interrupting Rating	Electrical Characteristics	Category Temperature Range °C
Metric	Inch		Code	A					
1608	0603	FMC16	501	0.5	260	F	32Vd.c. 35A	Rated Current / Opening time ×100% / 4h Min. ×200% / 5s Max. ×300% / 0.2s Max.	−55～+125
			751	0.75	140	A			
			102	1.0	110	L			
			132	1.25	80	M			
			152	1.5	65	H			
			202	2.0	45	S			
			252	2.5	32	T			
			302	3.0	26	R			
			402	4.0	18	X			
			502	5.0	14	Y			

●Performance Characteristics

Description	Requirements	Test Methods
Temperature rise on the surface	75°C max.	Ambient temperature : 10°C~30°C Carrying Current : Rated current
Bend strength of the face plating	No visible damage	**IEC 60127-4** Clause 8.3 1mm/s, amount of bend : 3 mm
Solderability	At least 95% of the terminal surface must be covered by new solder	**IEC 60127-4** Clause 8.5 Be immersed into solder at 235°C for 2s.
Resistance to soldering heat	No visible damage. Meet electrical requirement	**IEC 60127-4** Clause 8.7 Be immersed into solder at 260°C for 10s.

Note. Please contact KAMAYA for special applications.

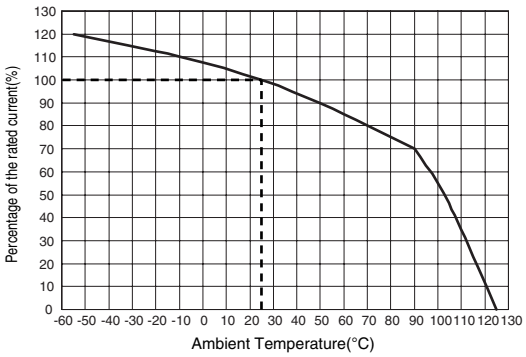
●Recommended Derating for Rated Current

- Nominal Derating

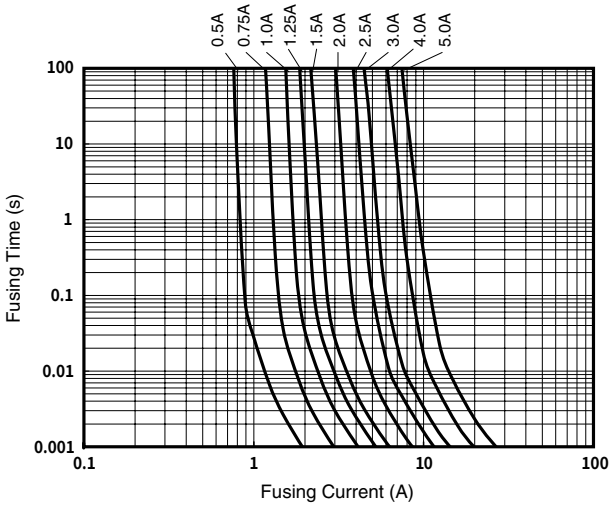
  Nominal Derating ≤ 75% of Rated Current
- Temperature Derating

  Please refer to the following graph regarding the current derating value for ambient temperature.

Ex.) If FSC16 102AB (Rated Current 1.0A) is used under ambient temperature 70°C,
Kamaya recommends, less than the current value derated as below,
Rated Current : 1.0A× (Nominal Derating : 75%×Temperature Derating : 80%) = 0.6A

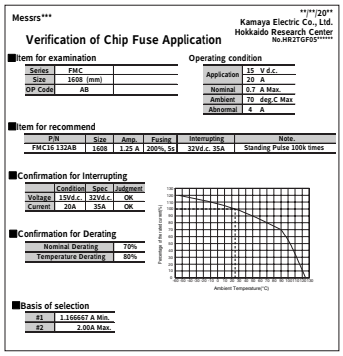


●Time / Current Characteristics



●Help Support of Fuse Selection

Please contact kamaya sales Dept, if you need to confirm In-rush Current endurance, Anti-pulse performance etc. We can provide Application Guide for FMC16 selection.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Verification of Chip Fuse Application

Kamaya Electric Co., Ltd.
Hokkaido Research Center

■Item for examination

Series	FMC
Size	1608 (mm)
OP Code	AB

Operating condition

Application	15 V d.c.
	20 A
Nominal	0.7 A Max.
Ambient	70 deg.C Max
Abnormal	4 A

■Item for recommend

P/N	Size	Amp.	Fusing	Interrupting	Note
FMC16 132AB	1608	1.25 A	200%, 5s	32Vd.c. 35A	Standing Pulse 100k times

■Confirmation for Interrupting

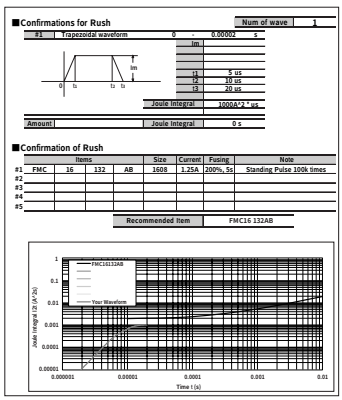
	Condition	Spec.	Judgment
Voltage	15Vd.c.	32Vd.c.	OK
Current	20A	35A	OK

■Confirmation for Derating

Nominal Derating	70%
Temperature Derating	80%

■Basis of selection

#1	1.166667 A Min.
#2	2.00A Max.


■Confirmations for Rush

#1	Trapezoidal waveform	0	0.00002	s
		Im		
		t1	5 us	
		t2	10 us	
		t3	20 us	
	Joule Integral		1000A^2 * us	
Amount		Joule Integral	0 s	

■Confirmation of Rush

	Items		Size	Current	Fusing	Note
#1	FMC	16	132	AB	1608	1.25A	200%, 5s	Standing Pulse 100k times
#2								
#3								
#4								
#5								

Recommended Item	FMC16 132AB