
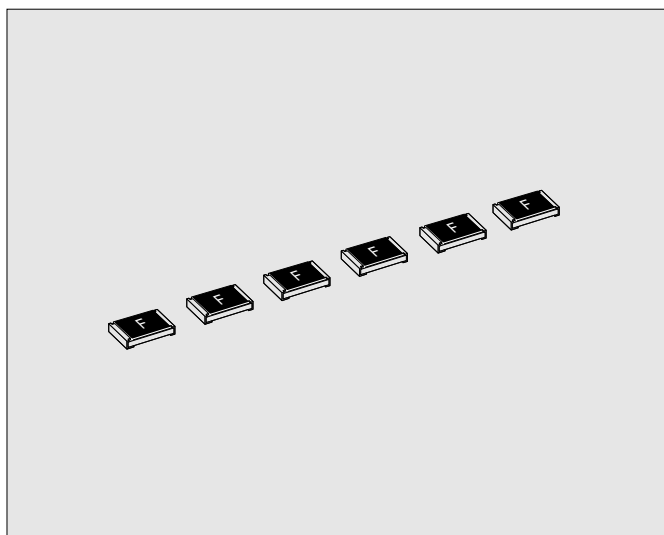


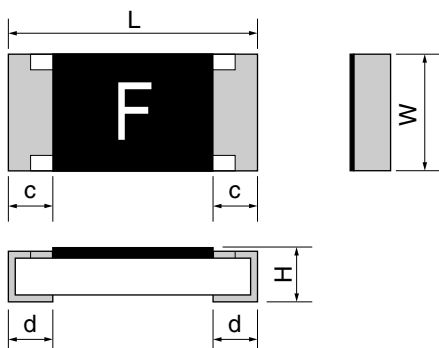
# FMC16 Option Code : AB/Low Ohm & Fast Acting

## ●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. Pb\*1, Halogen\*2 and Antimony\*3 free product
  - \*1  $Pb \leq 1000ppm$
  - \*2 Cl or Br  $\leq 900ppm$ , Cl+Br  $\leq 1500ppm$
  - \*3  $Sb_2O_3 \leq 900ppm$
4. Certified UL, c-UL.
  - File No. : E176847 
5. 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.

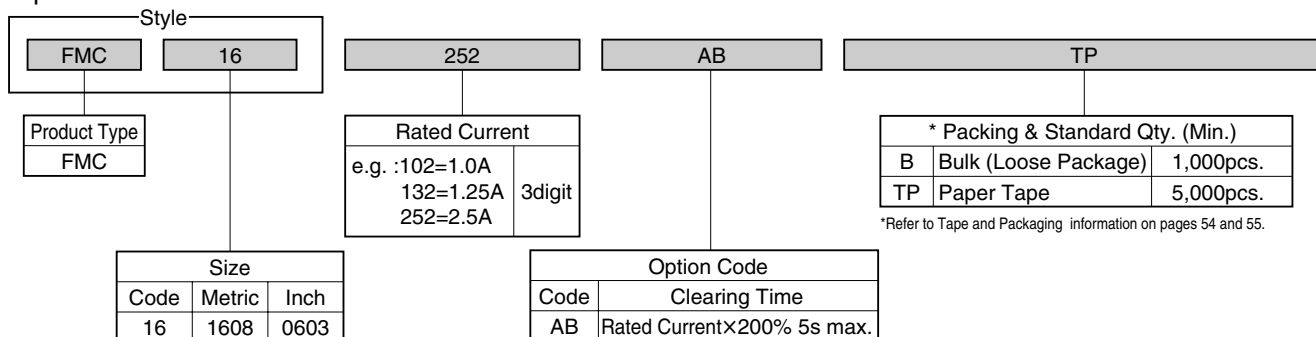
Style	Metric	Inch	L	W	H	c	d	*Unit weight/pc.
FMC16	1608	0603	$1.6 \pm 0.1$	$0.8^{+0.15}_{-0.05}$	$0.45 \pm 0.10$	$0.3 \pm 0.15$	$0.3 \pm 0.1$	2mg

Unit : mm

\*Values for reference

## ●Part Number Description

Example



\*Refer to Tape and Packaging information on pages 54 and 55.

# CHIP FUSES; RECTANGULAR TYPE

FMC16 Option Code : AB

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

Size		Style	Rated Current		Internal Resistance m ohm max.	Mark	Interrupting Rating	Electrical Characteristics		Working Temperature Range °C
Metric	Inch		Code	A				Rated Current	Opening time	
1608	0603	FMC16	501	0.5	260	F	32Vd.c. 35A	×100%	4h Min.	-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

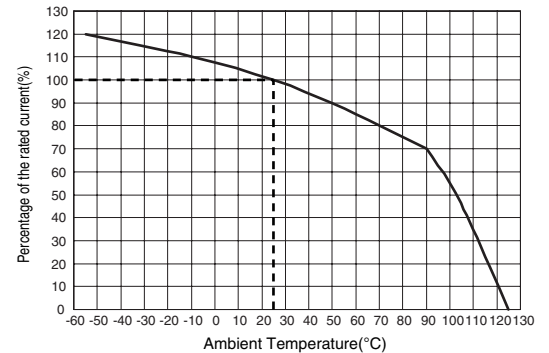
Description	Requirements	Test Methods
Temperature rise on the surface	75°C max.	Ambient temperature : 10°C~30°C Carrying Current : Rated current
Bend strength of the face plating	No visible damage	IEC 60127-4 Clause 8.3 1mm/s, amount of bend : 3 mm
Solderability	At least 95% of the terminal surface must 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.

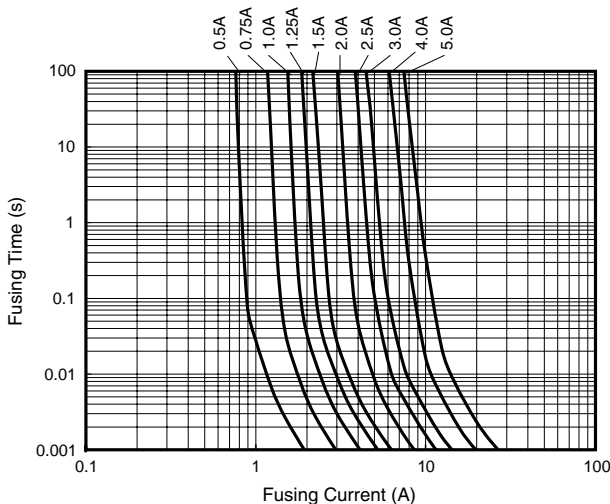
## ●Recommended Derating for Rated Current

- 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 FMC16 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.

Messrs\*\*\* \*\*\*/20\*\*  
Kamaya Electric Co., Ltd.  
Hokkaido Research Center  
No.HR27GF05\*\*\*

### Verification of Chip Fuse Application

Item for examination: Series FMC, Size 0603 (mm), OP-Code AB, Application 15\_V.d.c., Nominal 0.7\_A.Max., Ambient 70\_deg.C Max., Abnormal I.A.A.

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

Confirmation for Interrupting: Condition OK, Spec. Judgment OK, Voltage 15V.d.c. 30V.d.c. OK, Current 30A 35A OK

Confirmation for Derating: Nominal Derating 75%, Temperature Derating 80%

Basis of selection: #1 1.1667 A Min., #2 2.00k Max.

### Confirmations for Rush

Waveform: Trapezoidal waveform, Num of wave 1, Unit: 1000000\_s

Confirmation of Rush: #1 FMC 16 132 AB, Size 1608, Current 1.25A, Fusing 200% 5s, Note Standing Pulse 100k times, Recommended Item FMC16 132AB

Waveform graph showing current vs time for a trapezoidal pulse.