

NEW

CHIP FUSES; RECTANGULAR TYPE

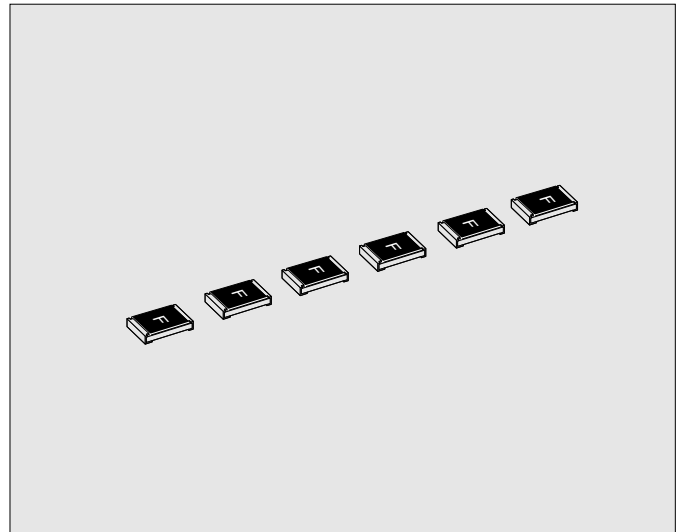
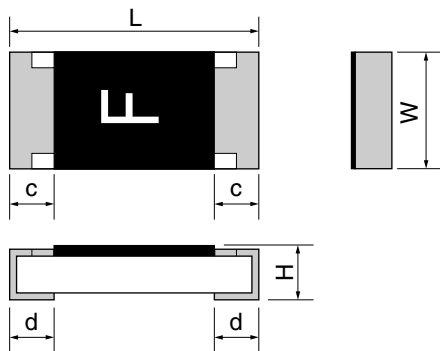
KAMAYA OHM

FMC10 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/FHC10AB Series.
Ex) FMC10 501AB 190m typ
FCC10 501AB 310m typ
3. Pb*1, Halogen*2 and Antimony*3 free product
*1 Pb ≤ 1000ppm
*2 Cl or Br ≤ 900ppm, Cl+Br ≤ 1500ppm
*3 Sb₂O₃ ≤ 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.

**●Dimensions**

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

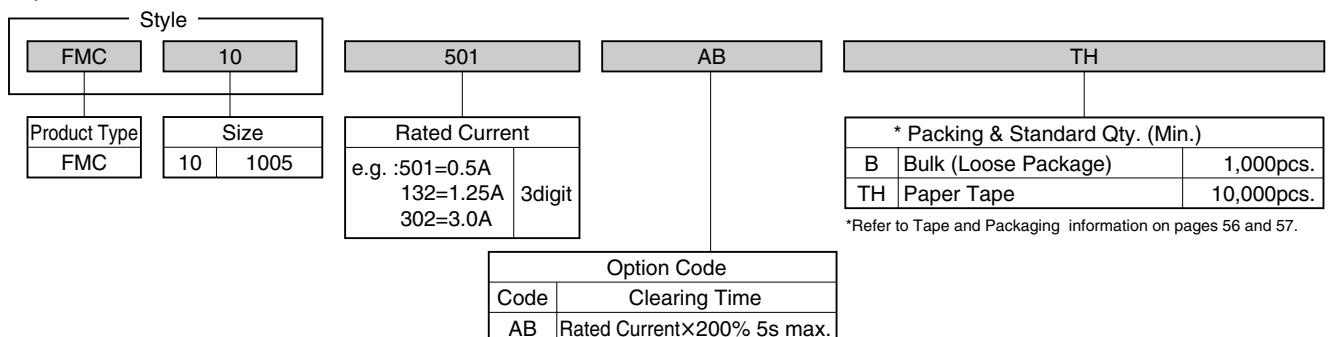
Unit : mm

Style	Metric	Inch	L	W	H	c	d	*Unit weight/pc.
FMC10	1005	0402	1.0 ± 0.05	0.5 ± 0.05	0.38 ± 0.05	0.2 ± 0.1	0.25 ± 0.10	0.62mg

*Values for reference

●Part Number Description

Example



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FMC10 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	
1005	0402	FMC10	501	0.5	240	F	24Vd.c. 35A	×100%	4h Min.	-55~+125
			751	0.75	140	A				
			102	1.0	95	L				
			132	1.25	73	M				
			152	1.5	60	H				
			202	2.0	41	S				
			252	2.5	32	T				
302	3.0	25	R							

●Performance Characteristics

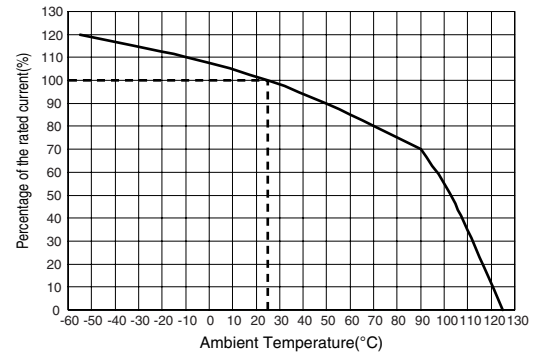
Description	Requirements	Test Methods
Temperature rise on the surface	75°C max.	Ambient temperature : 10°C~30°C Carrying Current : Rated current
Bend strength of the face plating	No visible damage	IEC 60127-4 Clause 8.3 1mm/s, amount of bend : 3 mm
Solderability	At least 95% of the terminal surface must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

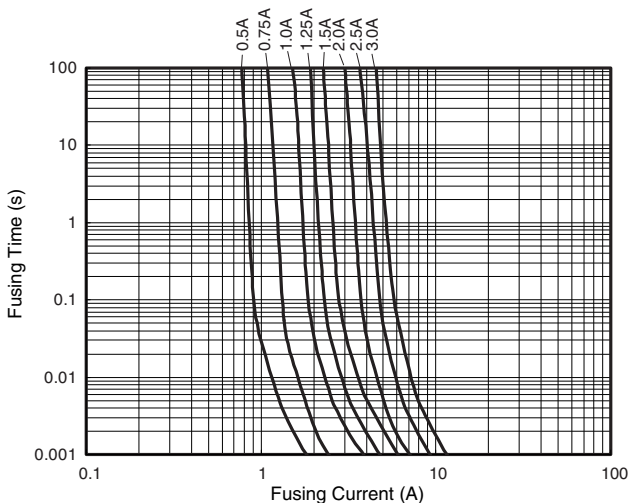
●Recommended Derating for Rated Current

- 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 FMC10 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 FMC10 selection.

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

Verification of Chip Fuse Application

Item for examination: Series: FMC, Size: 1005 (mm), OP Code: AB, Application: LS V.d.c., Rated Current: 2.0 A, Nominal: 0.7 A Max., Ambient: 70 deg.C Max., Abnormal: 1.4 A.

Operating condition: 24Vd.c. 35A, Standing Pulse 100s times

Item for recommend: P/N: FMC10-152AB, Size: 1.5A, Amp: 200%, Fusing: 24Vd.c. 35A, Note: Standing Pulse 100s times

Confirmation for Interrupting: Condition: Spec. Judgment: Voltage: 15Vd.c. 24Vd.c. OK, Current: 20A 1.5A OK

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

Basis of selection: #1: 1.052067 A Max., #2: 2 A Max.

Confirmations for Rush

Temporally variation: R (ms) 0.0000, I (A) 10000, t1 (ms) 10, t2 (ms) 10, t3 (ms) 10, t4 (ms) 10, t5 (ms) 10, t6 (ms) 10, t7 (ms) 10, t8 (ms) 10, t9 (ms) 10, t10 (ms) 10, t11 (ms) 10, t12 (ms) 10, t13 (ms) 10, t14 (ms) 10, t15 (ms) 10, t16 (ms) 10, t17 (ms) 10, t18 (ms) 10, t19 (ms) 10, t20 (ms) 10, t21 (ms) 10, t22 (ms) 10, t23 (ms) 10, t24 (ms) 10, t25 (ms) 10, t26 (ms) 10, t27 (ms) 10, t28 (ms) 10, t29 (ms) 10, t30 (ms) 10, t31 (ms) 10, t32 (ms) 10, t33 (ms) 10, t34 (ms) 10, t35 (ms) 10, t36 (ms) 10, t37 (ms) 10, t38 (ms) 10, t39 (ms) 10, t40 (ms) 10, t41 (ms) 10, t42 (ms) 10, t43 (ms) 10, t44 (ms) 10, t45 (ms) 10, t46 (ms) 10, t47 (ms) 10, t48 (ms) 10, t49 (ms) 10, t50 (ms) 10, t51 (ms) 10, t52 (ms) 10, t53 (ms) 10, t54 (ms) 10, t55 (ms) 10, t56 (ms) 10, t57 (ms) 10, t58 (ms) 10, t59 (ms) 10, t60 (ms) 10, t61 (ms) 10, t62 (ms) 10, t63 (ms) 10, t64 (ms) 10, t65 (ms) 10, t66 (ms) 10, t67 (ms) 10, t68 (ms) 10, t69 (ms) 10, t70 (ms) 10, t71 (ms) 10, t72 (ms) 10, t73 (ms) 10, t74 (ms) 10, t75 (ms) 10, t76 (ms) 10, t77 (ms) 10, t78 (ms) 10, t79 (ms) 10, t80 (ms) 10, t81 (ms) 10, t82 (ms) 10, t83 (ms) 10, t84 (ms) 10, t85 (ms) 10, t86 (ms) 10, t87 (ms) 10, t88 (ms) 10, t89 (ms) 10, t90 (ms) 10, t91 (ms) 10, t92 (ms) 10, t93 (ms) 10, t94 (ms) 10, t95 (ms) 10, t96 (ms) 10, t97 (ms) 10, t98 (ms) 10, t99 (ms) 10, t100 (ms) 10

Confirmation of Rush

Item: FMC, Size: 10, 132, AB, 1005, 1.25A, 200%, 5s, Standing Pulse 100s times

Recommended Item: FMC10-152AB