

# FSC/In-rush Withstand

## ●Features

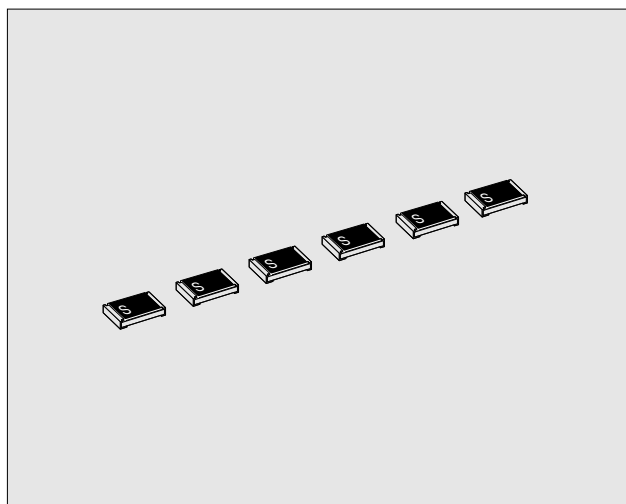
- 0603inch size is available and suitable for circuit protection of portable devices and terminals.
- High anti pulse performance.
- Certified UL, c-UL.

·File No. : E176847

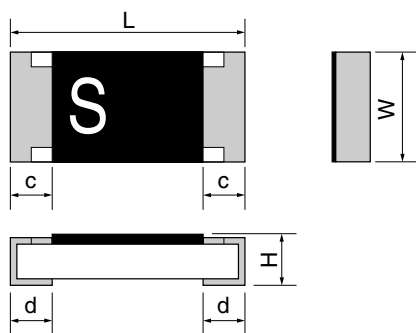


### 4.Major application

- 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.

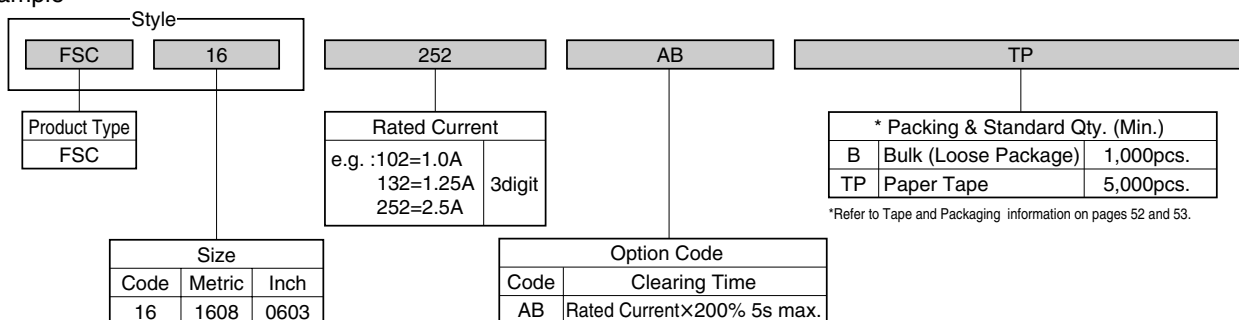
Style	Metric	Inch	L	W	H	c	d	*Unit weight/pc.
FSC16	1608	0603	1.6±0.1	0.8 <sup>+0.15</sup> <sub>-0.05</sub>	0.45±0.10	0.3±0.15	0.3±0.1	2mg

Unit : mm

\*Values for reference

## ●Part Number Description

Example



\*Refer to Tape and Packaging information on pages 52 and 53.

CHIP FUSES; RECTANGULAR TYPE

FSC

●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	FSC16	501	0.5	400	F	32Vd.c. 35A	<table border="1"> <tr> <th>Rated Current</th> <th>Opening time</th> </tr> <tr> <td>×100%</td> <td>4h Min.</td> </tr> <tr> <td>×200%</td> <td>5s Max.</td> </tr> <tr> <td>×300%</td> <td>0.2s Max.</td> </tr> </table>	Rated Current	Opening time	×100%	4h Min.	×200%	5s Max.	×300%	0.2s Max.	-55~+125
			Rated Current	Opening time													
			×100%	4h Min.													
			×200%	5s Max.													
			×300%	0.2s Max.													
			631	0.63	300	I											
			751	0.75	210	A											
			801	0.8	180	K											
			102	1.0	115	L											
			132	1.25	90	M											
			152	1.5	70	H											
			162	1.6	60	N											
			202	2.0	50	S											
			252	2.5	37	T											
302	3.0	28	R														
322	3.15	26	U														
402	4.0	18	X														
502	5.0	14	Y														

●Performance Characteristics

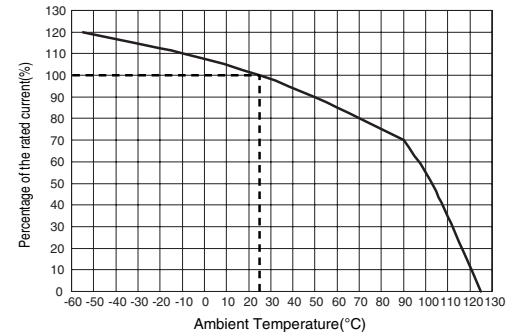
Description	Requirements	Test Methods
Temperature rise on the surface	75°C max.	Ambient temperature : 10°C~30°C Carrying Current : Rated current
Bend strength of the face plating	No visible damage	IEC 60127-4 Clause 8.3 1mm/s, amount of bend : 3 mm
Solderability	At least 95% of the terminal surface must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

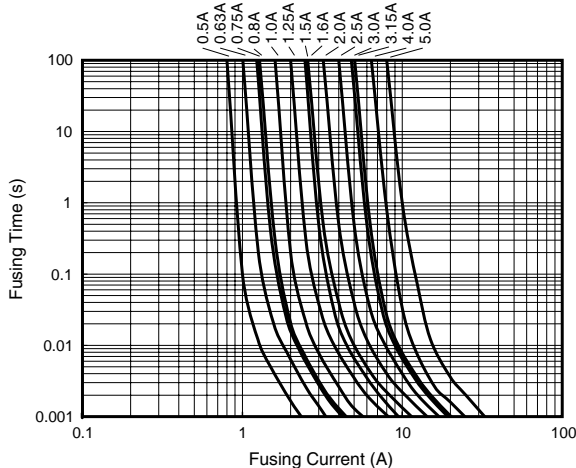
●Recommended Derating for Rated Current

- 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 FSC16 selection.

Verification of Chip Fuse Application

Item for examination: Series (FSC), Size (1608 (mm)), OP-Code (AB)

Operating condition: Application (15 V.d.c.), Normal (0.7 A Max.), Ambient (25°C max.), Abnormal (4 A)

Item for recommend: Part No. (FSC16 102AB), Rating (1.0A), Style (AB), Interrupting (32Vd.c. 35A), Standby Pulse (100A times)

Confirmation for Interrupting: Voltage (15V d.c.), Current (0.7A Max.), Control (20A 35A) - OK

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

Basis of selection: #1 (1.0A Max.), #2 (2.0A Max.)

Confirmations for Rush

Confirmation of Rush: Item (FSC), Size (16), Style (AB), Current (1.25A), Pulse (200V, 50), Standby Pulse (100A times)

Confirmation of Derating: Nominal Derating (75%), Temperature Derating (80%)

Graphs showing current waveforms and derating curves.

Chip Fuses  
FSC/In-rush Withstand