

250SF/250SFK, 500SF/500SFK

FEATURES

- A 6-mm- ϕ fuse, which is the of the same size as a glass tube fuse, can be used to implement a current blocking capacity of 10kA at 500V
- Able to block off even DC
- Space-efficient
- UL approved for up to rated 20A (500SF/SFK)

RATING

● 250SF/SFK

Rated voltage and blocking capacity : 250V AC-10kA, 250V DC (L/R = 10ms)-10kA
Minimum block-off current : 250V AC/DC- 4 times the rated amperage
Maximum arc voltage: 500V



● 500SF/SFK

Rated voltage and blocking capacity : 500V AC-10kA, 500V DC (L/R = 2ms)-10kA
Minimum block-off current : 500V AC/DC- 4 times the rated amperage
Maximum arc voltage : 1000V

UL / cUL standard approved rating

Rated voltage and blocking capacity: Same as the standard rating.
(250SF/SFK are not cUL approved.)

Specifications 250SF/250SFK

Type	Rated Amperage (A)	Fusing I ² t (A ² S)	Shutdown I ² t (A ² S) at AC250V 10KA	Power Loss (W)	Weight (g)	Fig	Standard
250SF-4UL	4	4	14	0.6	SF= 2.5	SF= Fig 1	
250SFK04UL				0.7			
250SF-6UL	6	11	27	0.9			
250SFK06UL				1.1			
250SF-10UL	10	25	60	1.6	SFK= 3.25	SFK= Fig 2	
250SFK10UL				1.7			
250SF-16UL	16	55	120	3.5			
250SFK16UL				3.2			
250SF-25	25	220	400	5.0			—
250SFK25				5.0			

Ta= 25°C



250SF/500SF



250SFK/500SFK

CCC standard approved rating

When applying the standard to UL standard approved items, use the fuse in the following rating.

*The CCC standard is an option. Enter "TC" at the end of product name when ordering (e.g. 500SF-10ULTC).



Rated voltage and breaking capacity :500V AC-50kA, 500V DC (L/R = 10ms)-50kA
(250SF/SFK are not CCC approved.)

CAUTION!

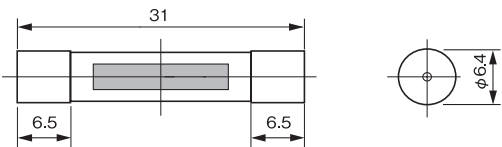
- Read "FOR SAFE USE" and "PROTECT FUSE USER'S GUIDE" at the back of this catalog before use.
- A small fuse may generate a relatively large amount of heat, so a fuse with sufficient capacity is recommended for long, continuous use.

500SF/ 500SFK

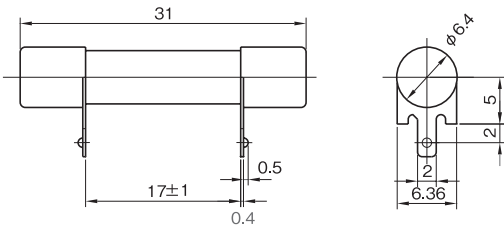
Ta=25°C

Type	Rated Amperage (A)	Fusing I ² t (A ² S)	Shutdown I ² t (A ² S) at AC500V 10KA	Power Loss (W)	Weight (g)	Fig	Standard
500SF-4UL	4	4	29	0.6	SF= 2.5	SF= Fig 1	
500SFK04UL				0.7			
500SF-6UL	6	11	50	0.9			
500SFK06UL				1.1			
500SF-10UL	10	25	110	1.6	SFK= 3.25	SFK= Fig 2	
500SFK10UL				1.7			
500SF-16UL	16	55	230	3.5			
500SFK16UL				3.2			
500SF-20UL	20	155	480	4.0			—
500SFK20UL				4.3			

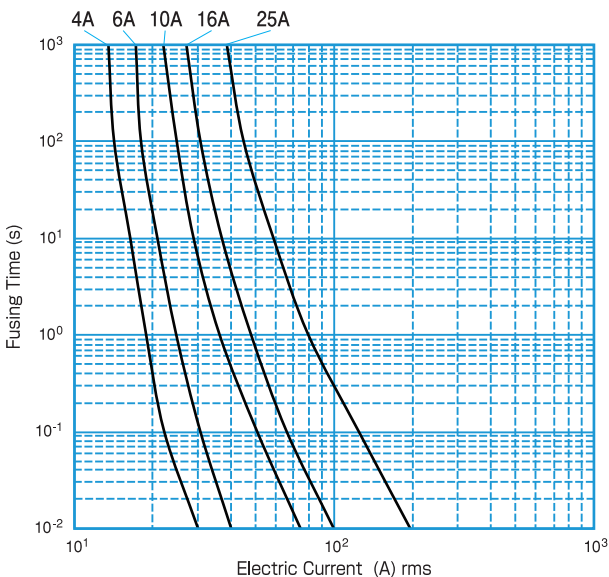
Dimensions 250SF, 500SF <Fig.1>



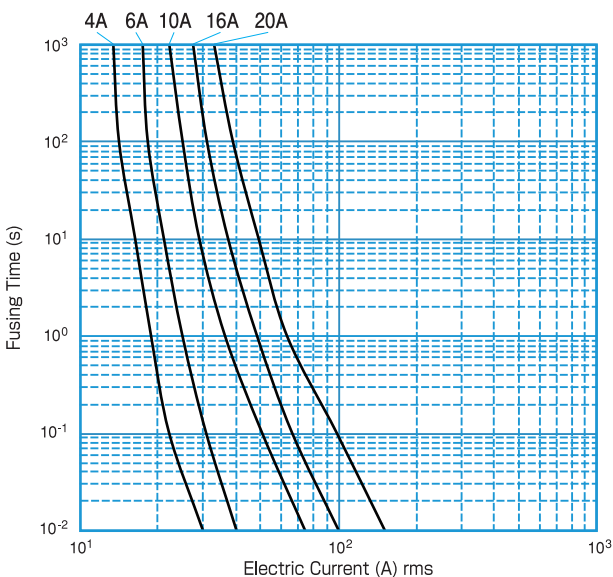
250SFK, 500SFK <Fig.2>



Fusing Characteristics 250SF/ 250SFK



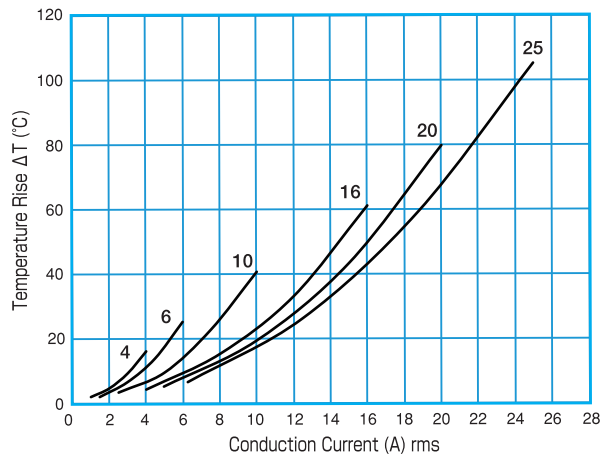
500SF/ 500SFK



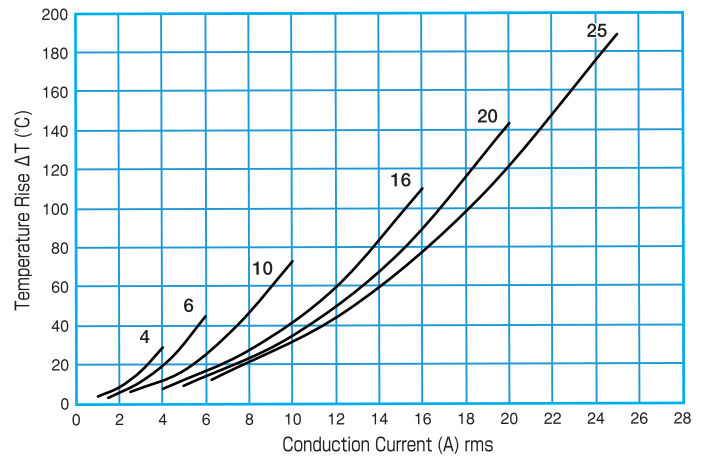
FAST ACTING FUSES - COMPACT TYPES

**IF YOU NEED ANY HELP IN DETERMINING WHAT FUSE YOU NEED
CONTACT NATIONAL FUSE PRODUCTS
AT 1-800-328-0496 OR EMAIL SALES@NATIONALFUSE.COM**

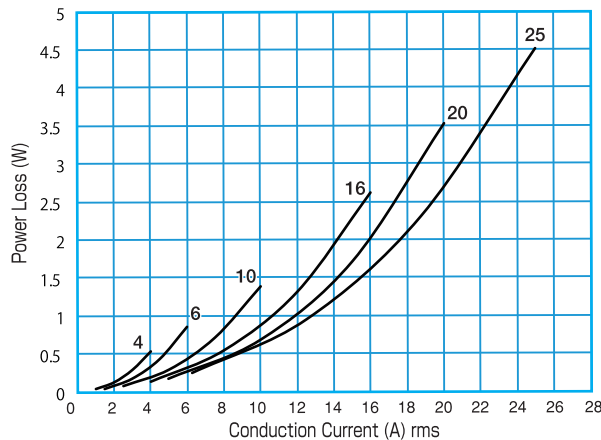
Temperature Rise 250SF/500SF



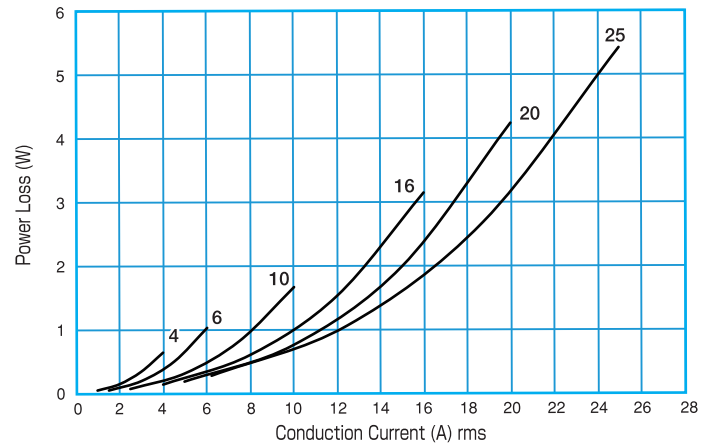
250SF K /500SF K



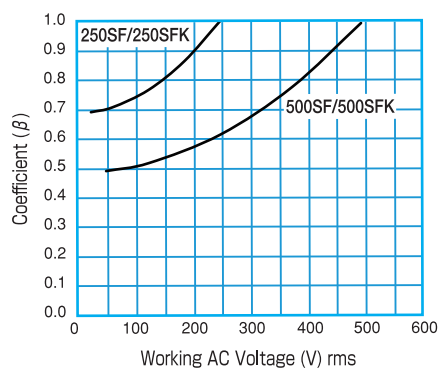
Power Loss 250SF/500SF



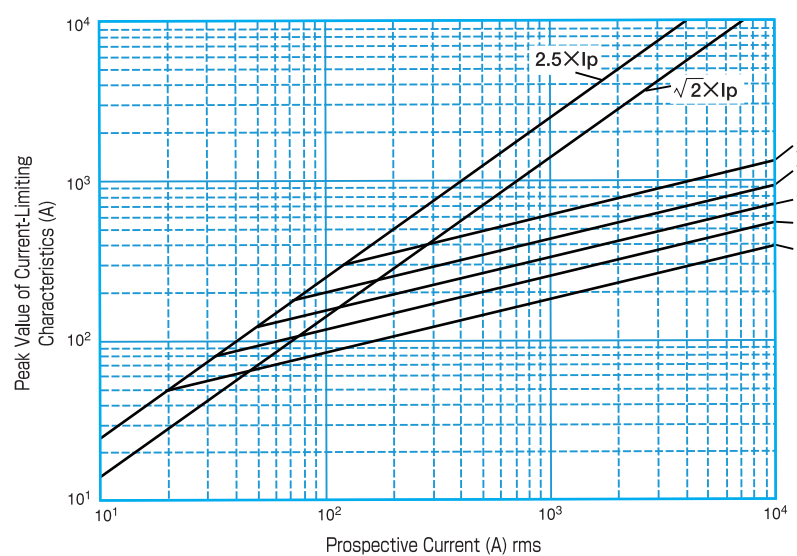
250SF K /500SF K



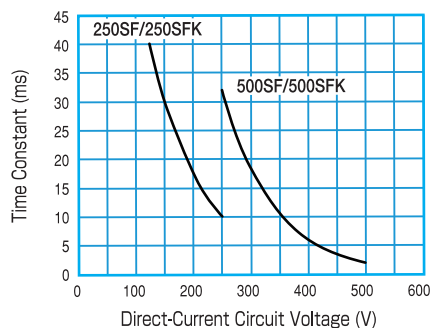
Shutdown I^2t Against Working AC Voltage



Current-Limiting Characteristics



Application to Direct-Current Circuit



Power Loss and Temperature Characteristics

● Testing Conditions for Board-Soldered-Type Fuses

The power loss and the temperature characteristics are studied using an FR-4 board (one-side board) and a 35- μ m-thick copper foil with a copper foil width of 0.5 mm/A depending on the rated amperage (e.g. 5 mm width for a product rated at 10A).