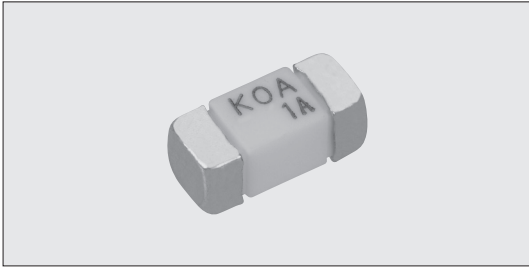


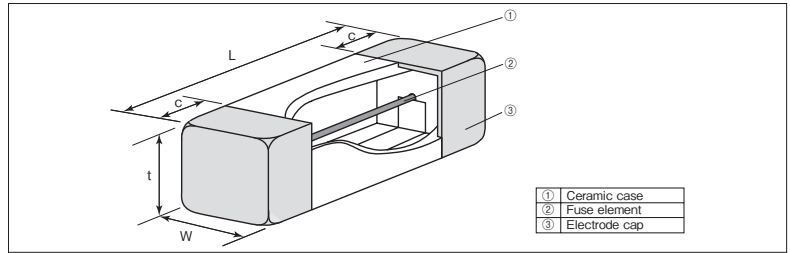
CCF1F | Chip Current Fuses (Anti Sulfuration)

Chip Fuses



Coating color : White

Construction



Features

- Excellent anti-sulfuration characteristic due to using high sulfuration-proof material.
- Meets IEC60127-4 specifications. (7A or less)
- Stable fusing characteristics due to the original technology.
- Suitable for reflow and flow soldering.
- Products meet EU-RoHS requirements.

Approvals Awarded

UL248.14 File No.E171861
c-UL(CSA)C22.2 No.248.14 File No.E171861

Reference Standard

IEC60127-4 Universal modular fuse-Links
Standard sheet2

Applications

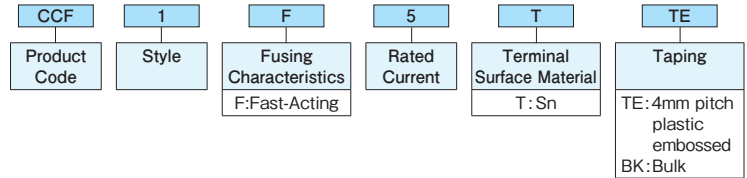
- Power supplies for Illumination inverters
- Copying machines, Laser beam printers
- Industrial equipment

Dimensions (mm)

Type (Inch Size Code)	Dimensions (mm)				Weight (g) (1000pcs)
	L±0.2	W±0.2	t±0.2	c±0.2	
CCF1F (2410)	6.0	2.5	2.5	1.4	140

Type Designation

Example



Contact us when you have control request for environmental hazardous material other than the substance specified by EU-RoHS.

For further information on taping, please refer to APPENDIX C on the back pages.

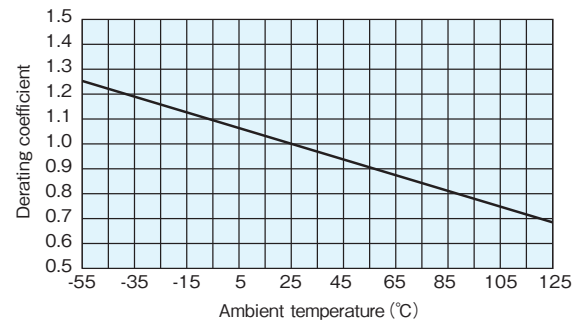
Ratings

Type	Rated Current	Rated Voltage	Interrupting Capacity	Fusing Characteristics		Internal R. (mΩ) Max.	Nominal Melting I ² t (A ² ·s)	Taping & Q'ty/Reel(pcs)
				Rated Current	Fusing Time			TE
CCF1F0.4	0.4A	UL (c-UL) AC125V DC125V	UL (c-UL) AC125V 50A DC125V 50A	UL (c-UL) 100% 200%	4h Min. 60s Max.	650	0.024	1,000
CCF1F0.5	0.5A					510	0.030	
CCF1F0.63	0.63A					390	0.052	
CCF1F0.8	0.8A					250	0.125	
CCF1F1	1A					90.4	0.156	
CCF1F1.25	1.25A					75.9	0.220	
CCF1F1.6	1.6A					59.3	0.513	
CCF1F2	2A					42.9	0.814	
CCF1F2.5	2.5A					36.6	1.31	
CCF1F3.15	3.15A					26.0	2.37	
CCF1F4	4A					20.1	3.85	
CCF1F5	5A					15.3	6.5	
CCF1F6.3	6.3A					11.4	10.6	
CCF1F7	7A					10.6	12.8	
CCF1F8	8A	9.5	17.0					
CCF1F10	10A	7.5	27.7					
CCF1F12	12A	UL (c-UL) AC65V DC65V	UL (c-UL) AC65V 50A DC65V 50A			4.5	73.5	
CCF1F15	15A					3.5	125.5	

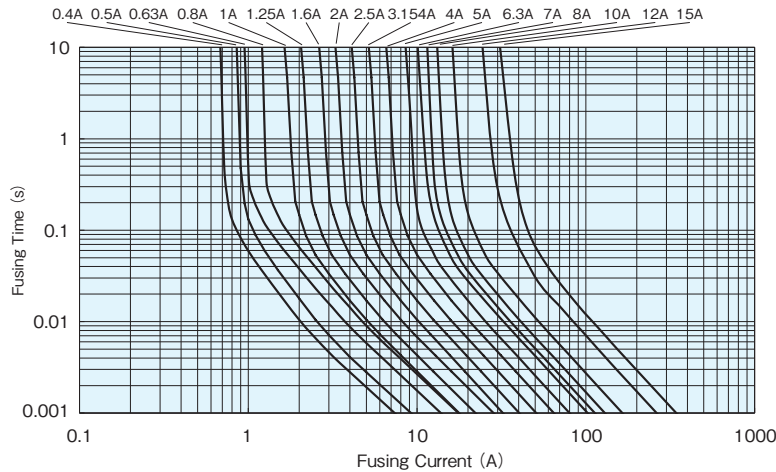
Operating Temperature Range : -55°C ~ +125°C

Deratings

- **Stationary current**
Regard the peak of stationary current waveform as stationary current value when the stationary current is repeated pulse.
- **Normal derating**
Normal derating of this product should be 0.7max. as standards.
- **Deratings by ambient temperatures**
When using the products at the temperatures other than normal temperature (25°C ±5°C), temperature adjustment will be required. Please refer the derating coefficient as shown in the figure.



Fusing Characteristic



Performance

Test Items	Performance Requirements $\Delta R \pm \%$		Test Methods
	Limit	Typical	
Fusing Characteristics	Within specified time. Insulation resistance shall not be less than 0.1M Ω .	—	Fusing time measured under rated current \times 200% (at 25°C)
Surface Temp. Rise	Max. Temp. Rise 75°C and not Fusing (All the rating).	—	Surface temp. should be measured by rated current \times 100% 1hour
Bending Test	No mechanical damage	—	Distance between holding points 90mm, bent by 3mm at arte of 1mm/s
Resistance to soldering heat	10	3	260°C \pm 5°C, 10s \pm 0.5s
Solderability	95% coverage min.	—	235°C \pm 5°C, 3s \pm 0.5s
Load life	10	5	70°C \pm 2°C, 1000hr, Rated current \times 70%, 1.5h ON/0.5h OFF cycle
Load life moisture	10	5	40°C \pm 2°C, 90%~95%RH, 1000hr, Rated current \times 70%, 1.5h ON/0.5h OFF cycle
Rapid change of temperature	10	5	-55°C(30min.) / +125°C(30min.) 100cycles
Sulfuration test	10	—	Soaked in industrial oil with sulfur substance 3.5% contained 105°C \pm 3°C 500h

Precautions for Use

- High temperature affects on the product's performances. After mounting the products on your applications, be sure that the maximum temperature rise is 50 degrees or below and that if the circuit is interrupted or not under abnormal current.
- When you select fuse product, please make sure to confirm "Precautions for Use of Fusing Components" in this catalogue and ask KOA sales.