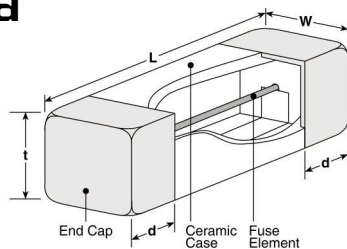




### features

- Surface mount fuse suitable for primary and secondary circuits
- Ceramic case provides excellent mechanical strength
- Suitable for flow and reflow soldering
- Stable fusing characteristics due to the original technology
- Excellent Anti-Surge characteristics
- Products with lead-free terminations meet EU RoHS and China RoHS requirements

### dimensions and construction



Type	Dimensions inches (mm)			
	L	W	t	d
CCF	.236±.008 (6.0±0.2)	.098±.008 (2.5±0.2)	.098±.008 (2.5±0.2)	.055±.008 (1.4±0.2)

### ordering information

CCF	1	N	1		T	TE
Type	Style	Characteristic	Rated Current	Rated Voltage (UL)	Termination Material	Packaging
		N: Normal blow	Reference rating chart	Nil: 125Va.c./60Vd.c. or 65Va.c./65Vd.c. D: 125Va.c./160Vd.c.	T: Sn	TE: 4mm pitch embossed plastic (1,000 pieces/reel)

For further information on packaging, please refer to Appendix A.

### applications and ratings

Part Designation	Current Rating	Voltage Rating	Operating Temperature Range	Interrupting Capacity	Fusing Characteristics		Internal R. (mΩ) Max.	Normal Melting Pt (A <sup>2</sup> , seconds)
					Rated Current	Fusing Time		
CCF1N0.4	400mA	UL (c-UL) AC 125V DC 60V (DC 160V)	-55°C to +125°C	UL (c-UL) AC 125V 50A DC 60V 50A (DC 160V)	UL (c-UL) 100% 200%	4 hour min. 1 second max.	650	0.024
CCF1N0.5	500mA						510	0.030
CCF1N0.63	630mA						390	0.052
CCF1N0.8	800mA						250	0.125
CCF1N1	1A	PSE AC 100V		PSE AC 100V 100A	PSE 130% 160% 200%	4 hour min. 1 hour max. 1 second max.	90.4	0.156
CCF1N1.25	1.25A						75.9	0.220
CCF1N1.6	1.6A						59.3	0.513
CCF1N2	2A						42.9	0.814
CCF1N2.5	2.5A						36.6	1.31
CCF1N3.15	3.15A						26	2.37
CCF1N4	4A	UL (c-UL) AC 125V 50A DC 60V 50A		UL (c-UL) AC 125V 50A DC 60V 50A	UL (c-UL) 100% 200%	4 hour min. 1 second max.	20.1	3.85
CCF1N5	5A						15.3	6.5
CCF1N6.3	6.3A		11.4				10.6	
CCF1N7	7A		10.6				12.8	
CCF1N8	8A	(DC 160V)	(DC 160V)			9.5	17.0	
CCF1N10	10A					7.5	27.7	
CCF1N12	12A	UL (c-UL) AC 65V DC 65V	UL (c-UL) AC 65V 50A DC 65V 50A	UL (c-UL) 100% 200%	4 hour min. 60 seconds max.	4.5	73.5	
CCF1N15	15A	DC 65V	DC 65V 100A	100% 200%	4 hour min. 60 seconds max.	3.5	125.5	
CCF1N30	30A					1.7	527.5	

Operating Temp. Range: -55°C ~ +125°C

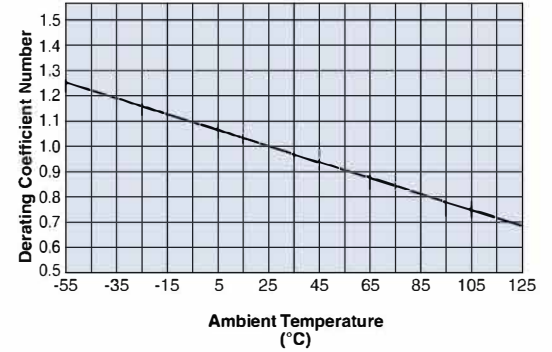
Specifications given herein may be changed at any time without prior notice. Please confirm technical specifications before you order and/or use.

11/01/23

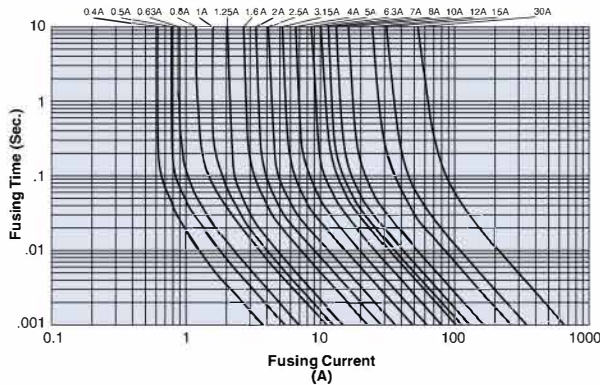
## environmental applications

### 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 to the derating coefficient as shown in the figure.



### Fusing Characteristics



### Performance Characteristics

Parameter	Requirement Δ R±%		Test Method
	Limit	Typical	
Fusing Characteristics	Within specified time. No restrike	—	Fusing time measured under rated current x 160% and 200%
Surface Temperature Rise	Max. Temp. Rise 140°C	—	Surface temperature should be measured by rated current x 115%
	Max. Temp. Rise 75°C	—	Surface temperature should be measured by rated current x 100%
Bending Test	No mechanical damages	—	Distance between holding points 90mm, bent by 3mm at rate of 1mm/s
Resistance to Soldering Heat	±10%	±3%	260°C ±5°C, 10 seconds ± 0.5 seconds
Solderability	±95% coverage min.	—	235°C ±5°C, 3 seconds ± 0.5 seconds
Load Life	±10%	±5%	70°C ± 2°C, 1000 hours, rated current x 70%, 1.5 hr ON, 0.5 hr OFF cycle
Load Life Moisture	±10%	±5%	40°C ± 2°C, 90 - 95% RH, 1000 hours, rated current x 70%, 1.5 hr ON, 0.5 hr OFF cycle
Rapid Change of Temperature	±10%	±5%	-55°C (30 minutes), +125°C (30 minutes), 100 cycles