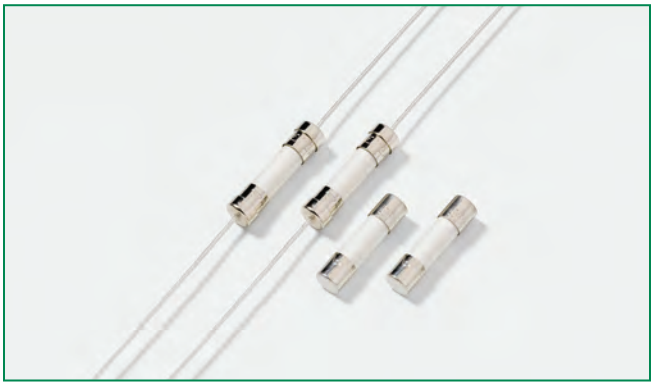
216 Series, 5 x 20 mm, Fast-Acting Fuse



Agency Approvals

Agency	Agency File Number	Ampere Range
PS E	Cartridge Certificates: 1-5A NBK 080205-E10480A 6.3A-10A NBK 250702-E10480E 12.5A NBK 240108-JP1021C 16A NBK 240108-JP1021E Leaded Certificates: 1-5A NBK 080205-E10480B 6.3A-10A NBK 250702-E10480F 12.5A NBK 240108-JP1021D 16A NBK 240108-JP1021F	1A – 16A
CCC	Certificates: 2003010207079960	50mA – 6.3A
KC	Certificates: SU05001-2013	1A – 10A
UL	Recognised File: E10480 Guide: JDYX2	50mA – 10A 12.5A, 16A
CSA	File: 029862 Acc. Class: LR1422-30	
SEMKO	File: 1027156 8117 45 1117973 1020822 1027014	50mA – 125mA 160mA – 800mA 1A – 6.3A 8A – 10A 16A
DVE	License: 40013834	50mA – 6.3A *8A, *10A
VDE	License: 40016442	*12.5A
FIMKO	License: KM41462	1A – 6.3A
CE		50mA – 16A

*Approval for Cartridge versions only

Description

5x20mm fast-acting ceramic body cartridge fuse designed to IEC specification.

Features

- Designed to International (IEC) Standards for use globally
- Meets the IEC 60127-2, sheet 1 specification for fast-acting fuses
- Available in cartridge and axial lead form
- RoHS compliant and lead-free

Applications

Used as supplementary protection in appliance or utilization equipment to provide individual protection for components or internal circuits.

Electrical Characteristics for Series

% of Ampere Rating	Ampere Rating	Opening Time
150%	50mA – 4A	60 minutes, Minimum
	5A – 6.3A	60 minutes, Minimum
	8A – 16A	30 minutes, Minimum
210%	50mA – 4A	30 minutes, Maximum
	5A – 6.3A	30 minutes, Maximum
	8A – 16A	30 minutes, Maximum
275%	50mA – 4A	0.01 sec.., Min.; 2 sec. Max.
	5A – 6.3A	0.01 sec.., Min.; 3 sec. Max.
	8A – 16A	0.04 sec., Min.; 20 sec. Max.
400%	50mA – 4A	.003 sec., Min.; 0.3 sec. Max.
	5A – 6.3A	.003 sec., Min.; 0.3 sec. Max.
	8A – 16A	.01 sec.., Min.; 1.0 sec. Max.
1000%	50mA – 4A	.02 seconds, Maximum
	5A – 6.3A	.02 seconds, Maximum
	8A – 16A	.03 sec.onds, Maximum

© 2012 Littelfuse, Inc.
Specifications are subject to change without notice.
Please refer to www.littelfuse.com/series/216.html for current information.

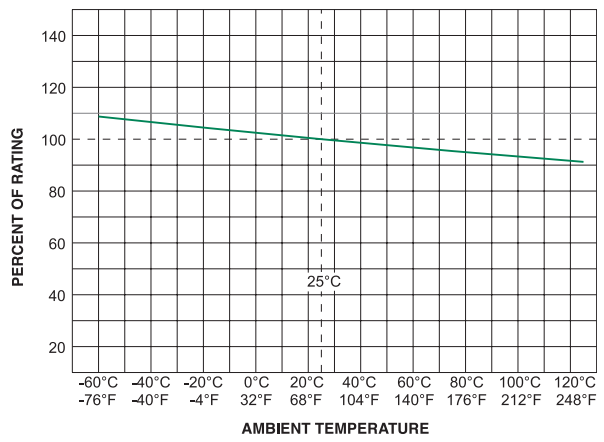
Revised: September 13, 2012

Electrical Characteristics Specifications by Item

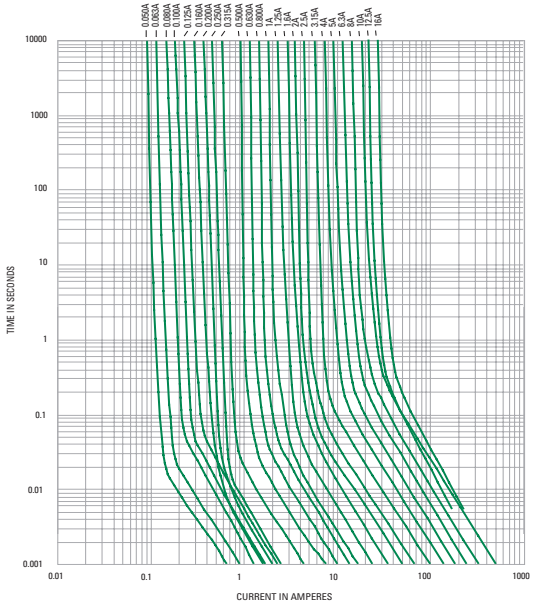
Amp Code	Amp Rating (A)	Voltage Rating (V)	Interrupting Rating	Nominal Cold Resistance (Ohms)	Nominal Melting I^2t (A^2 sec)	Maximum Voltage Drop at Rated Current (mV)	Maximum Power Dissapation at 1.5In (W)	Agency Approvals									
.050	0.05	250	1500A@ 250Vac	15.9000	0.00019	10000	1.6			x	x	x	x	x	x		
.063	0.063	250		10.4500	0.00054	8800	1.6			x	x	x	x	x	x		
.080	0.08	250		7.8850	0.00084	7600	1.6			x	x	x	x	x	x		
.100	0.1	250		5.7925	0.00450	7000	1.6			x	x	x	x	x	x		
.125	0.125	250		3.6750	0.00546	5000	1.6			x	x	x	x	x	x		
.160	0.16	250		5.3490	0.00576	4300	1.6			x	x	x	x	x	x		
.200	0.2	250		3.3500	0.00439	3500	1.6			x	x	x	x	x	x		
.250	0.25	250		2.3500	0.00891	2800	2.5			x	x	x	x	x	x		
.315	0.315	250		1.8500	0.01000	2500	2.5			x	x	x	x	x	x		
.500	0.5	250		0.8660	0.16500	1800	2.5			x	x	x	x	x	x		
.630	0.63	250		0.4650	0.17500	1500	2.5			x	x	x	x	x	x		
.800	0.8	250		0.2950	0.28500	1200	2.5			x	x	x	x	x	x		
001.	1	250		0.2370	0.18000	1000	2.5	x	x	x	x	x	x	x	x		x
1.25	1.25	250		0.1530	0.48000	800	4	x	x	x	x	x	x	x	x		x
01.6	1.6	250		0.1112	1.00500	600	4	x	x	x	x	x	x	x	x		x
002.	2	250		0.0764	1.87000	500	4	x	x	x	x	x	x	x	x		x
02.5	2.5	250		0.0584	2.69500	400	4	x	x	x	x	x	x	x	x		x
3.15	3.15	250		0.0368	6.70000	350	4	x	x	x	x	x	x	x	x		x
004.	4	250		0.0247	14.99500	300	4	x	x	x	x	x	x	x	x		x
005.	5	250		0.0183	27.46000	250	4	x	x	x	x	x	x	x	x		x
06.3	6.3	250		0.0137	56.43000	200	4	x	x	x	x	x	x	x	x		x
008.	8	250		0.0123	64.31500	200	4		x		x	x	x	x	x*		x
010.	10	250		0.0079	154.34000	200	4		x		x	x	x	x	x*		x
12.5	12.5	250		0.0057	235.00000	200	4				x	x		x		x*	x
016.	16	250	750A@ 250Vac	0.0040	462.50000	200	4.5				x	x	x	x			x

* Approval for cartidge versions only.
I^2t test at 10x rated current

Temperature Rerating Curve

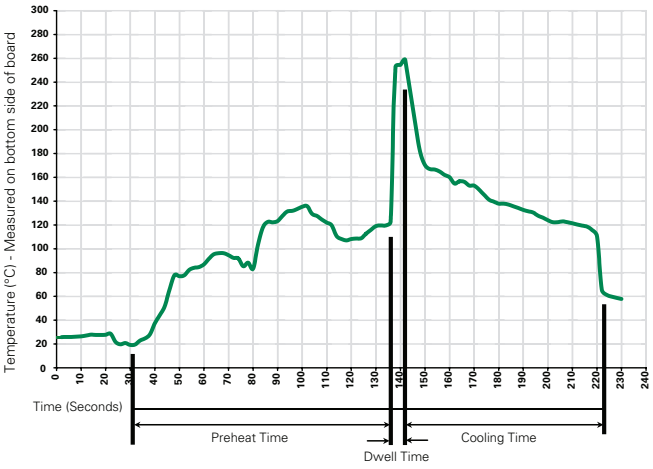


Average Time Current Curves



© 2012 Littelfuse, Inc.
Specifications are subject to change without notice.
Please refer to www.littelfuse.com/series/216.html for current information.

Soldering Parameters - Wave Soldering



Recommended Process Parameters:

Wave Parameter	Lead-Free Recommendation
Preheat: (Depends on Flux Activation Temperature)	(Typical Industry Recommendation)
Temperature Minimum:	100° C
Temperature Maximum:	150° C
Preheat Time:	60-180 seconds
Solder Pot Temperature:	260° C Maximum
Solder Dwell Time:	2-5 seconds

Recommended Hand-Solder Parameters:

Solder Iron Temperature: 350° C +/- 5°C
Heating Time: 5 seconds max.

Note: These devices are not recommended for IR or Convection Reflow process.

Product Characteristics

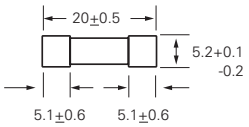
Material	Body: Ceramic Cap: Nickel–plated brass Leads: Tin–plated Copper Filler (160mA-16A): Sand
Terminal Strength	MIL-STD-202G, Method 211A, Test Condition A
Solderability	Reference IEC 60127 Second Edition 2003-01 Annex A
Product Marking	Cap 1: Brand logo, current and voLage rating Cap 2: Agency approval markings
Packaging	Available in Bulk (M=1000 pcs/pkg) or on Tape/Reel (MRET1=1000 pcs/reel)

Operating Temperature	–55ºC to +125ºC
Thermal Shock	MIL-STD-202G, Method 107G, Test Condition B: (5 cycles –65˚C to +125˚C)
Vibration	MIL-STD-202G, Method 201A
Humidity	MIL-STD-202G, Method 103B, Test Condition A. high RH (95%) and elevated temperature (40˚C) for 240 hours.
Salt Spray	MIL-STD-202G, Method 101D, Test Condition B

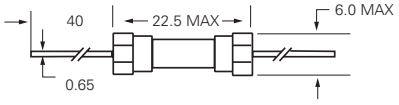
© 2012 Littelfuse, Inc.
Specifications are subject to change without notice.
Please refer to www.littelfuse.com/series/216.html for current information.

Dimensions

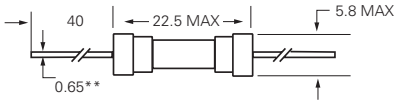
0216 000XP



0216.050XEP
to
0216.800XEP



0216001.XEP
to
0216016.XEP



All dimensions in mm
** Ratings above 6.3A have 0.8 mm diameter lead

Part Numbering System

0216 xxxx M X E P

Series

Amp Code
Refer to Amp Code column of Electrical Characteristics Table

Quantity Code
M = 1000

Packaging Code
X = Filler

Option Codes
Blank : Cartidge Type Fuse
E : Axial Leaded Fuse

Lead-free

Packaging

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code	Taping Width
216 Series				
Bulk	N/A	1000	MX	N/A
Bulk	N/A	1000	MXE	N/A
Reel and Tape	EIA 296-E	1000	MRET1	T1=53mm (2.087")
Bulk	N/A	1000	MXG	N/A
Bulk	N/A	1000	MXB	N/A
Bulk	N/A	100	HX	N/A

© 2012 Littelfuse, Inc.
Specifications are subject to change without notice.
Please refer to www.littelfuse.com/series/216.html for current information.

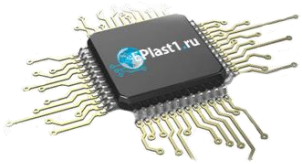
Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits,General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

Телефон: 8 (812) 309 58 32 (многоканальный)
Факс: 8 (812) 320-02-42
Электронная почта: org@eplast1.ru
Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.