





217 Series, 5 x 20 mm, Fast-acting Fuse

















Agency Approvals

Agonov	Aganay Fila Number	Amnoro Bongo			
Agency	Agency File Number	Ampere Range			
	Cartridge Certificates: NBK120802-E10480 A&C	1A – 5A 6.3A – 15A			
(FS)	Leaded Certificates:	1A – 5A			
	NBK120802-E10480 B&D	6.3A – 15A			
(αc)	Certificates: 2002010207007600	32mA – 800mA			
<u>u</u>	2002010207007600	1A – 6.3A			
	Certificates:	32mA – 40mA			
(T)	SU05001-3004 SU05001-2005	50mA – 315mA			
40	SU05001-2006	400mA – 6.3A 8A & 10A			
	SU05001-2007	3, 1 3, 13, 1			
~~	E10480				
W	JDYX2	32mA – 6.3A			
	File:				
(1)	029862 Acc. Class:				
	LR1422-30				
Θ	License:	400mA – 6.3A			
A	KM41462	1001111 (0.07 (
(2)	File: 948103, 915516,	32mA – 6.3A			
(3)	304518 & 304555	32IIIA - 0.3A			
OVE	License:	32mA – 6.3A,			
	40014645	8A*, 10A*			
VDE	License:	15A*			
	40016647				
€		32mA – 15A			

^{*}Approval for cartridge versions only

Description

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

Features

- Designed to International (IEC) Standards for use globally
- Meets the IEC 60127-2, Sheet 2
- specification for fastacting 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 Ratin		Opening Time				
	32mA-100mA	60 minutes, Minimum				
150%	125mA-6.3A	60 minutes, Minimum				
	8A-15A	30 minutes, Minimum				
	32mA-100mA	30 minutes, Maximum				
210%	125mA-6.3A	30 minutes, Maximum				
	8A-15A	30 minutes, Maximum				
	32mA-100mA	0.01 sec., Min.; .5 sec. Max.				
275%	125mA-6.3A	0.05 sec., Min.; 2 sec. Max.				
	8A-15A	0.05 sec., Min.; 2 sec. Max.				
	32mA-100mA	.003 sec., Min.; 0.1 sec Max.				
400%	125mA-6.3A	.01 sec., Min.; 0.3 sec. Max.				
	8A-15A	.01 sec., Min.; 0.4 sec. Max.				
	32mA-100mA	.02 second, Maximum				
1000%	125mA-6.3A	.02 second, Maximum				
	8A-15A	.04 second, Maximum				

Axial Lead & Cartridge Fuses 5×20 mm > Fast-Acting > 217 Series

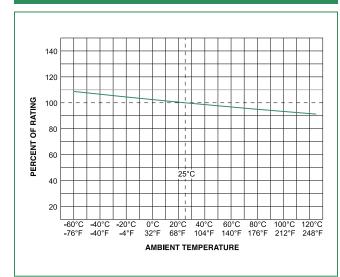


Electrical Characteristic Specifications by Item

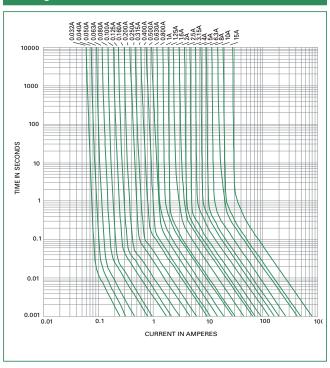
						Nominal	Nominal	Agency Approvals								
Amp Code	Amp Rating (A)	Voltage Rating (V)	Interrupting Rating	Nominal Cold Resistance (Ohms)	Nominal Melting I²t (A² sec)	Voltage Drop at Rated Current (mV)	Power Dissipation At Rated Current (W)	Ð	((()	₽S E	<i>91</i>	((2)	Œ	Ô¥E	₩
.032	0.032	250		262.2000	0.00006	10000	1.6	x	X		x	x	×	х	×	
.040	0.04	250		183.1500	0.00008	8000	1.6	×	Х		×	x	×	×	×	
.050	0.05	250		15.2000	0.00019	7000	1.6	х	х		x	x	x	х	×	
.063	0.063	250		10.4500	0.00056	5000	1.6	×	X		×	×	×	×	×	
.080	0.08	250		7.8900	0.00083	4000	1.6	×	X		×	×	×	х	x	
.100	0.1	250		5.6965	0.00450	3500	1.6	×	X		×	×	×	x	x	
.125	0.125	250		3.8200	0.00478	2000	1.6	×	х		х	х	х	х	x	
.160	0.16	250		2.5250	0.01000	2000	1.6	×	х		х	х	х	х	x	
.200	0.2	250		1.7000	0.02000	1700	1.6	×	X		x	х	х	х	x	
.250	0.25	250		1.2325	0.04000	1400	1.6	×	×		×	x	х	x	x	
.315	0.315	250	35A@250Vac	0.8800	0.11000	1300	1.6	×	X		x	x	x	x	x	
.400	0.4	250		0.2770	0.12500	1200	1.6	×	X		x	x	x	x	x	×
.500	0.5	250		0.2065	0.21500	1000	1.6	×	X		x	x	x	х	x	×
.630	0.63	250		0.1900	0.41000	650	1.6	×	X		×	x	×	×	x	×
.800	0.8	250		0.1203	0.85000	240	1.6	×	X		×	x	×	×	x	×
001.	1	250		0.0964	1.04500	200	1.6	х	х	х	X	x	x	х	×	×
1.25	1.25	250		0.0701	2.23000	200	1.6	×	×	×	х	x	х	x	x	×
01.6	1.6	250		0.0528	4.61500	190	1.6	×	×	×	x	x	x	x	×	×
002.	2	250		0.0416	5.73000	170	1.6	×	×	x	x	x	X	x	x	×
02.5	2.5	250		0.0334	9.46000	170	1.6	×	×	х	x	x	X	x	×	×
3.15	3.15	250		0.0224	17.72000	150	2.5	×	×	x	×	x	×	×	×	×
004.	4	250	40A@250Vac	0.0165	29.16500	130	2.5	х	×	х	х	x	х	х	×	×
005.	5	250	50A@250Vac	0.0137	42.79500	130	2.5	х	×	х	х	x	х	x	x	×
06.3	6.3	250	63A@250Vac	0.0095	62.46500	130	2.5	x	×	х	x	×	x	x	×	×
008.	8	250	80A@250Vac	0.0068	198.16000	130	4	х		х				×	x*	
010.	10	250	100A@250Vac	0.0063	217.63500	130	4	х		х				х	x*	
015.	15	250	150A@250Vac	0.0040	607.13500	130	4			×				х	x*	

^{*} Approval for cartidge versions only.

Temperature Rerating Curve

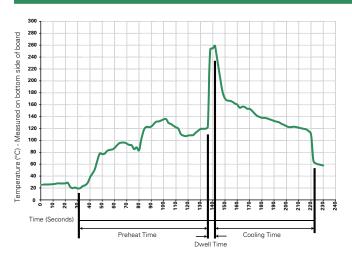


Average Time Current Curves





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 DwellTime:	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: Glass Cap: Nickel–plated brass Leads: Tin–plated Copper
Terminal Strength	MIL-STD-202G, Method 211A, Test Condition A
Solderability	Reference IEC 60127 Second Edition 2003-01 Annex A
Product Marking	Cap1: Brand logo, current and voltage ratings Cap2: Agency approval marks
Packaging	Available in Bulk (M=1000 pcs/pkg) or on Tape/Reel (MRET1=1000 pcs/reel)

Operating Temperature	-55°C to +125°C		
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		

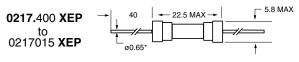
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Dimensions





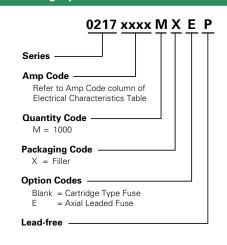


All dimensions in mm

Notes

* Ratings above 6.3A have 0.8 mm dia lead

Part Numbering System



Packaging									
Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code	Taping Width					
Bulk	N/A	1000	MX	N/A					
Bulk	N/A	1000	MXE	N/A					
Reel and Tape	EIA 296-E	1000	MRET1	T1=52mm (2.062")					

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