

RoHS **Pb** **235 Series, 5 x 20 mm, Fast-Acting Fuse**



Description

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

Features

- Designed to UL/CSA/ ANCE 248 Standard
- RoHS compliant and lead-free
- Available in cartridge and axial lead format

Applications

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

Agency Approvals

Agency	Agency File Number	Ampere Range
	Cartridge Certificates: NBK290502-E10480 G NBK290502-E10480 I Leaded Certificates: NBK290502-E10480 H NBK290502-E10480 J	1A – 5A 6A & 7A
	Certificates: SU05001 – 3007 SU05001 – 2002 SU05001 – 2003	100mA – 400mA 500mA – 3A 4A – 6A
	Listed File: E10480 Guide No: JDYX	100mA – 7A
	File No: 029862 Certificate Class No: LR1422-01	100mA – 3A 4A – 6A
		100mA – 7A

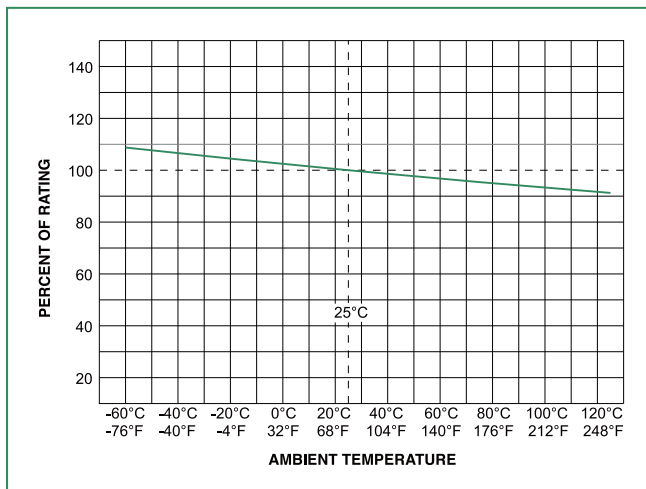
Electrical Characteristics for Series

% of Ampere Rating	Ampere Rating	Opening Time
100%	100mA – 7A	4 hours, Minimum
135%		1 hour, Maximum
200%		5 seconds, Maximum

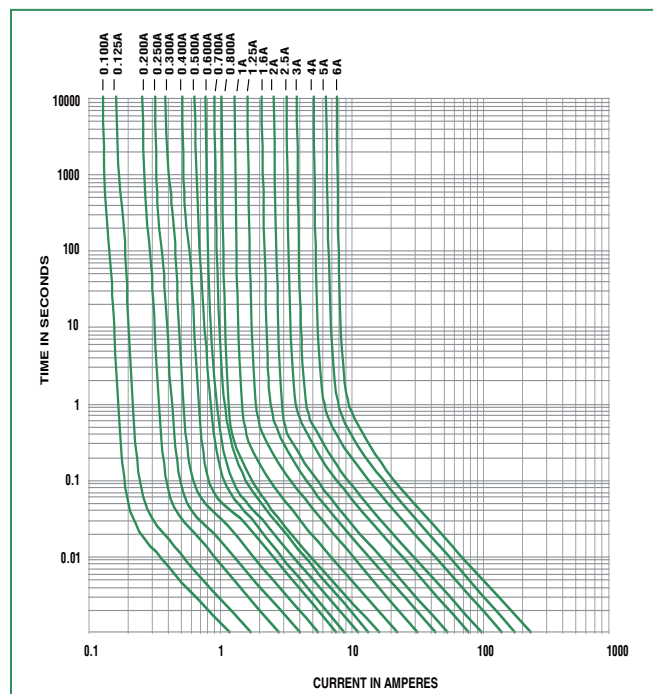
Electrical Characteristic Specifications by Item

Amp Code	Amp Rating (A)	Voltage Rating (V)	Interrupting Rating	Nominal Cold Resistance (Ohms)	Nominal Melting I ² t (A ² sec)	Agency Approvals				
						CE	UL	SP	PSE	K
.100	0.1	250	35A@250Vac, 10000A@125Vac	8.4000	0.00312	x	x	x		x
.125	0.125	250		5.7500	0.00273	x	x	x		x
.200	0.2	250		3.1500	0.00867	x	x	x		x
.250	0.25	250		2.2500	0.01660	x	x	x		x
.300	0.3	250		1.6000	0.03215	x	x	x		x
.400	0.4	250		1.750	0.05845	x	x	x		x
.500	0.5	250		0.4265	0.06915	x	x	x		x
.600	0.6	250		0.3195	0.11200	x	x	x		x
.700	0.7	250		0.2625	0.15600	x	x	x		x
.800	0.8	250		0.1920	0.25300	x	x	x		x
001.	1	250	100A@250Vac, 10000A@125Vac	0.1530	0.46750	x	x	x	x	x
1.25	1.25	250		0.1055	1.08500	x	x	x	x	x
01.6	1.6	250		0.0758	2.02500	x	x	x	x	x
002.	2	250		0.0603	2.64500	x	x	x	x	x
02.5	2.5	250		0.0437	5.44500	x	x	x	x	x
003.	3	250		0.0347	8.39500	x	x	x	x	x
03.5	3.5	250		0.0331	17.14000	x	x		x	
004.	4	125	10000@125Vac	0.0246	17.14000	x	x	x	x	x
005.	5	125		0.0184	27.41000	x	x	x	x	x
006.	6	125		0.0148	47.32500	x	x	x	x	x
007.	7	125		0.0157	64.81500	x	x		x	

Temperature Derating Curve

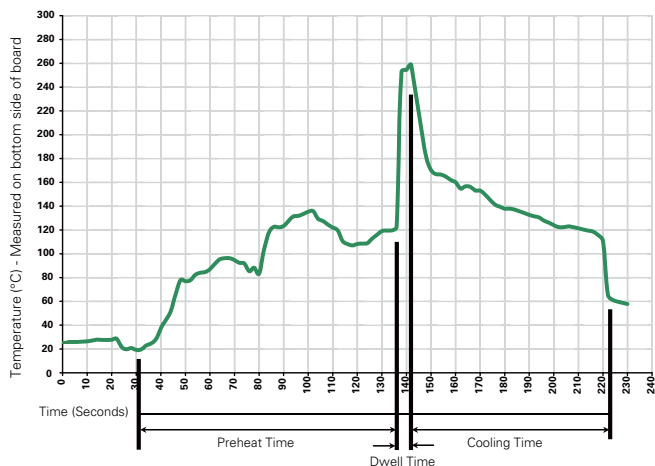


Average Time Current Curves



Please contact Littelfuse for details on T-C curve for 7A rating

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.

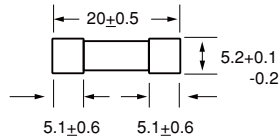
Product Characteristics

Materials	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	Cap 1: Brand logo, current and voltage rating Cap 2: Series and agency approval markings
Packaging	Available in Bulk (M=1000 pcs/pkg) or on Tape/Reel (MRET1=1000 pcs/reel)

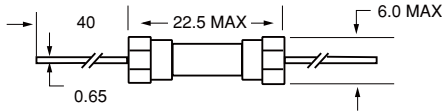
Operating Temperature	-55°C to +125°C
Thermal Shock	MIL-STD-202G, Method 107G, Test Condition B: (5 cycles -65°C + 125°C)
Vibration	MIL-STD-202G, Method 201A
Humidity	MIL-STD-202G, Method 103B, Test Condition A high RH (95%) and elevated temperature (40° C) for 240 hours
Salt Spray	MIL-STD-202G, Method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

Dimensions

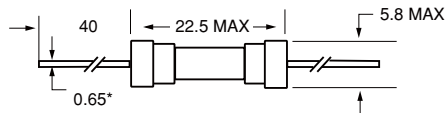
0235000P



**0235.100 XEP
to
0235.400 XEP**



**0235.500 XEP
to
0235006.XEP**

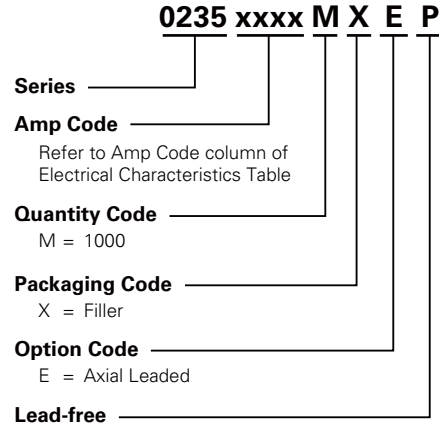


All dimensions in mm

Notes:

* Ratings above 6.3A
ø0.8 mm dia lead

Part Numbering System



Packaging

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code	Taping Width
235 Series				
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")
Bulk	N/A	1000	MXB	N/A
Bulk	N/A	100	HX	N/A
Bulk	N/A	100	HXE	N/A

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Littelfuse:

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[235005](#) [235006](#) [0235005.HXE-](#) [0235.125MXE-](#) [0235.200HXE-](#) [0235.500MXE-](#) [023501.6HXE-](#) [0235.600M-](#)
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[0235.800HXE-](#) [2351.25](#) [0235002.HXE-](#) [023501.6M-](#) [0235006.MXE-](#) [0235.400MXE-](#) [235.5](#) [235.8](#) [0235003.HXE-](#)
[0235.250HXE-](#) [0235001.M-](#) [0235002.M-](#) [0235004.HXE-](#) [235.700](#) [0235.800M-](#) [0235006.HXE-](#) [02351.25HXE-](#)
[0235.600MXE-](#) [0235.600H-](#) [0235.200M-](#) [02351.25M-](#) [0235.300M-](#) [0235.300MXE-](#) [0235003.H-](#) [0235.600HXE-](#)
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[0235.800MXE-](#) [0235.800H-](#) [0235004.M-](#) [235.300](#) [235.600](#)