

RoHS **234 Series, 5 x 20 mm, Medium-Acting Fuse**



Description

5x20mm medium-acting glass/ceramic body cartridge fuse designed to UL specification.

Features

- Designed to UL/CSA/ANCE 248 Standard
- Available in cartridge and axial lead format
- Glass body for 1-3.5A, Ceramic body for 4-10A
- RoHS compliant and lead-free

Agency Approvals

Agency	Agency File Number	Ampere Range
	Cartridge Certificates: NBK290502-E10480 C NBK280602-E10480 E NBK280602-E10480 G Leaded Certificates: NBK290502-E10480 H NBK280602-E10480 F NBK280602-E10480 H	1A – 3.5A 4A & 5A 6A – 10A
	Certificates: SU05001 – 3001 SU05001 – 4001 SU05001 – 2016	1A – 3.15A 3.5A 4A – 10A
	Listed File: E10480 Guide: JDYX	1A – 10A
	File: 029862 Certificate Class: LR1422-01	
		

Applications

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

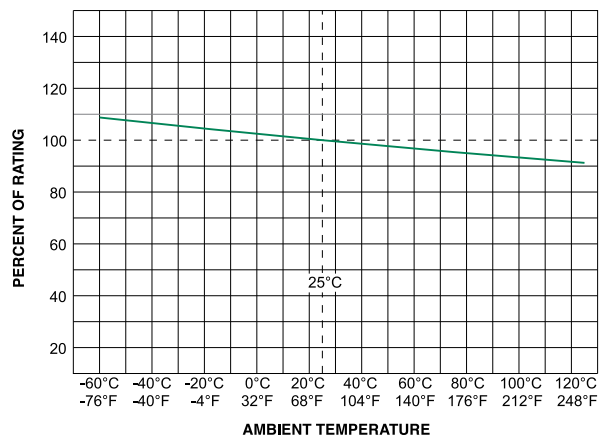
Electrical Characteristics for Series

% of Ampere Rating	Ampere Rating	Opening Time
100%	1 – 3.5	4 hours, Minimum
	4 – 10	1 hour, Minimum
135%	1 – 3.5	3 sec., Min; 1 hr. Max
	4 – 10	3 sec., Min; 1 hr. Max
200%	1 – 3.5	400ms., Min; 2.25 sec. Max
	4 – 10	400ms., Min; 4 sec. Max

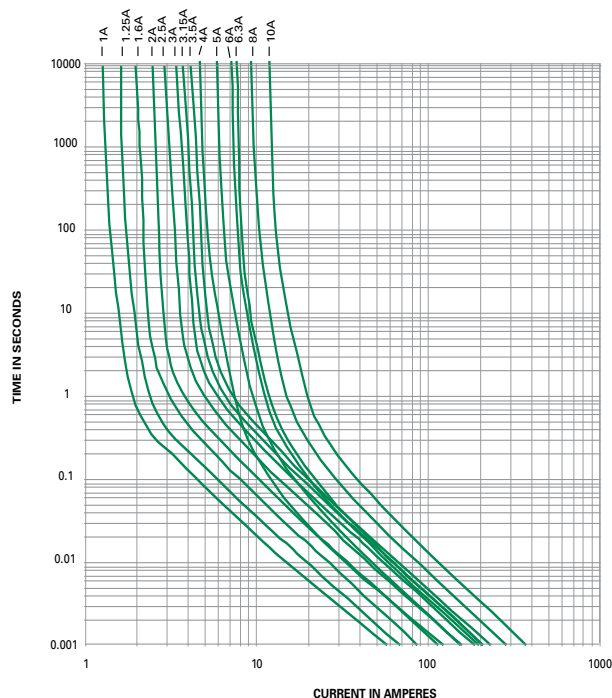
Electrical Characteristic Specification by Item

Amp Code	Ampere Rating (A)	Voltage Rating (V)	Interrupting Rating	Nominal Cold Resistance (Ohms)	Nominal Melting I ² t (A ² sec)	Agency Approvals				
										
001.	1	250	100A @ 250 VAC 10000A @ 125 VAC	0.1750	1.97500	x	x	x	x	x
1.25	1.25	250		0.1262	3.39000	x	x	x	x	x
01.6	1.6	250		0.0884	6.14000	x	x	x	x	x
002.	2	250		0.0684	9.97000	x	x	x	x	x
02.5	2.5	250		0.0521	17.04500	x	x	x	x	x
003.	3	250		0.0431	26.2400	x	x	x	x	x
3.15	3.15	250		0.0380	29.79500	x	x	x	x	x
03.5	3.5	250		0.0322	36.27500	x	x	x	x	x
004.	4	250		0.0304	10.37000	x	x	x	x	x
005.	5	250		0.0214	20.64500	x	x	x	x	x
006.	6	250	200A @ 250 VAC 10000A @ 125 VAC	0.0194	33.01500	x	x	x	x	x
06.3	6.3	250		0.0168	37.68500	x	x	x	x	x
008.	8	250		0.0144	80.67500	x	x	x	x	x
010.	10	250		0.0107	129.02500	x	x	x	x	x

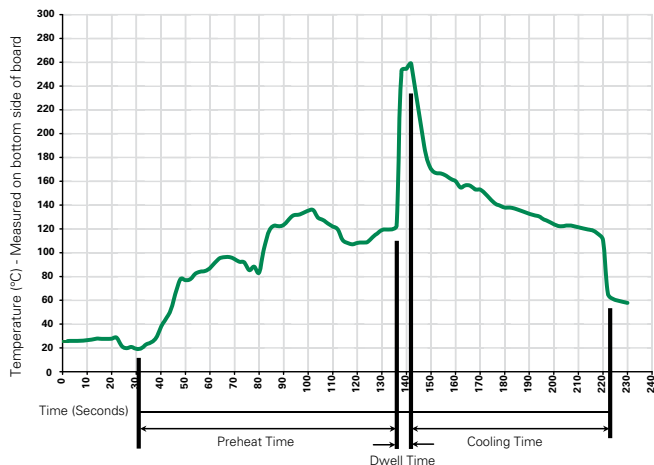
Temperature Derating Curve



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 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.

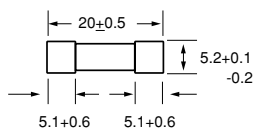
Product Characteristics

Materials	Body: Glass(1A-3.5A), Ceramic(4A-10A) Cap: Nickel-plated brass Leads: Tin-plated Copper Filter: Sand (4A – 10A)
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 (V=5, H=100, M=1000 pcs/pkg) or on Tape/Reel (MRET1=1000 pcs/reel)

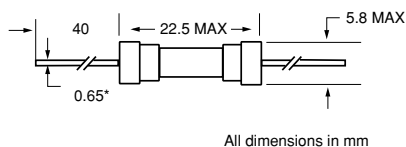
Operating Temperature	–55°C to +125°C
Thermal Shock	MIL-STD-202G, Method 107G, Test Condition B: (5 cycles –65°C to +125°C)
Vibration	MIL-STD-202F Method 201A
Humidity	MIL-STD-202G, Method 103B, Test Condition A. high RH (95%) and elevated temp (40°C) for 240 hours
Salt Spray	MIL-STD-202G, Method 101D,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

Dimensions

0234 000P



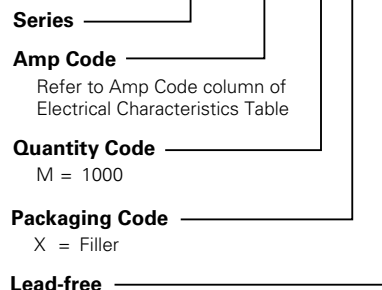
0234 000XEP



Notes:
 * Ratings above 6.3A
 have 0.8 mm dia lead

Part Numbering System

0234 xxxx M X P



Packaging

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code	Taping Width
234 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")