

RoHS **215SP Series, 5x20 mm, Time-Lag Fuse**



Description

5x20mm Time-Lag surge withstand ceramic body cartridge fuse designed to IEC specification

Features

- Designed to International (IEC) Standards for use globally
- Meets the IEC 60127-2, Sheet 5 specification for Time-Lag Fuses
- High breaking capacity
- Available in axial lead form
- RoHS compliant and Pb-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
210%	1A - 3.15A	30 minutes, Maximum
	4A - 6.3A	30 minutes, Maximum
	8A - 10A	30 minutes, Maximum
275%	1A - 3.15A	.75 sec. Min.; 80 secs. Max.
	4A - 6.3A	.75 sec. Min.; 80 secs. Max.
	8A - 10A	.75 sec. Min.; 80 secs. Max.
400%	1A - 3.15A	.095 sec. Min.; 5 secs. Max.
	4A - 6.3A	.150 sec. Min.; 5 secs. Max.
	8A - 10A	.150 sec. Min.; 5 secs. Max.
1000%	1A - 3.15A	.010 sec. Min.; .150 secs. Max.
	4A - 6.3A	.010 sec. Min.; .150 secs. Max.
	8A - 10A	.010 sec. Min.; .150 secs. Max.

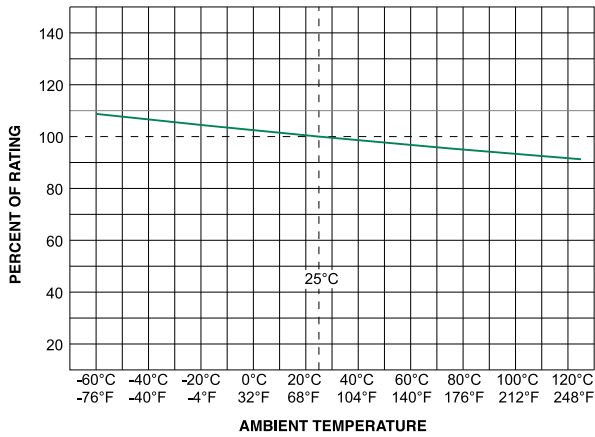
Agency Approvals

Agency	Agency File Number		Ampere Range
	Certificate No.	Leaded NBK080205-E10480B NBK250702-E10480 F	1A – 5A 6.3A – 10A
	Certificate No.	CQC100120411490	1A – 6.3A
	Certificate No.	SU05001-2011B SU05001-10001 SU05001-10002	1A – 2.5A 3.15A – 6.3A 8A
	Recognised File No. Guide No.	E10480 JDYX2	1A – 10A
	File No. Acc. Class No.	029862 LR1422-30	1A – 10A
	Licence. No.	40013521	1 – 8A
			1A – 10A

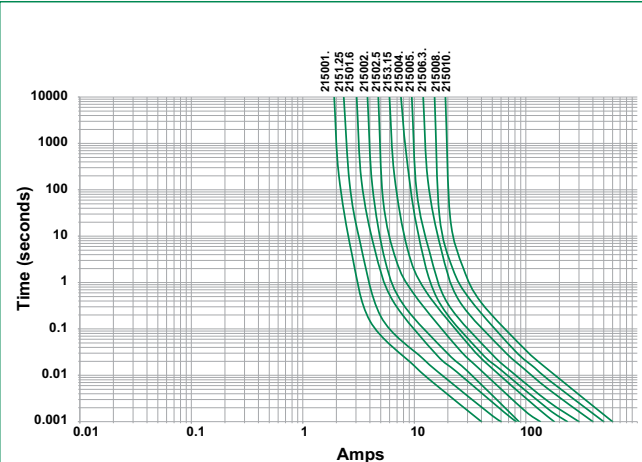
Electrical Characteristic Specifications by Item

Amp Code	Amp Rating	Voltage Rating	Interrupting Rating	Nominal Resistance Cold Ohms (Ohms)	Nominal Melting I ² t (A ² sec)	Maximum Voltage Drop at Rated Current (mV)	Maximum Power Dissipation at Rated Current (W)	Agency Approvals						
														
001.	1	250	1500 A @ 250 VAC	0.1515	1.52000	350	2.5	x	x	x	x	x	x	x
1.25	1.25	250		0.1074	3.20000	300	2.5	x	x	x	x	x	x	x
01.6	1.6	250		0.0707	6.83000	200	2.5	x	x	x	x	x	x	x
002.	2	250		0.0566	11.68000	190	2.5	x	x	x	x	x	x	x
02.5	2.5	250		0.0386	22.29000	180	2.5	x	x	x	x	x	x	x
3.15	3.15	250		0.0283	43.25500	140	4	x	x	x	x	x	x	x
004.	4	250		0.0185	46.96000	100	4	x	x	x	x	x	x	x
005.	5	250		0.0153	66.09500	100	4	x	x	x	x	x	x	x
06.3	6.3	250		0.0108	128.75000	100	4	x	x	x	x	x	x	x
008.	8	250		0.0092	209.88000	100	4	x		x	x	x	x	x
010.	10	250		0.0066	333.56500	100	4	x			x	x		x

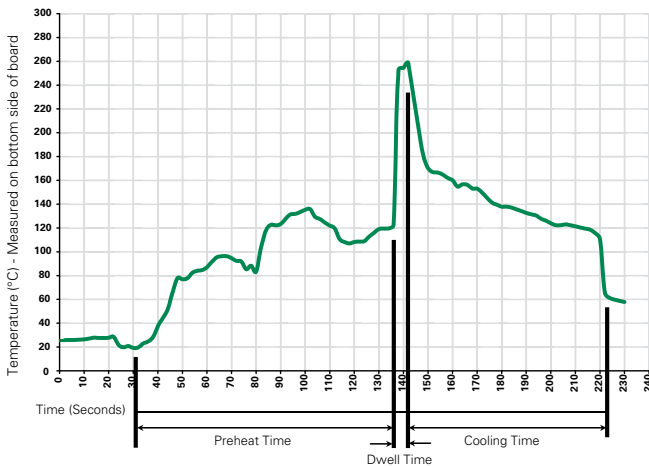
Temperature Derating Curve



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.

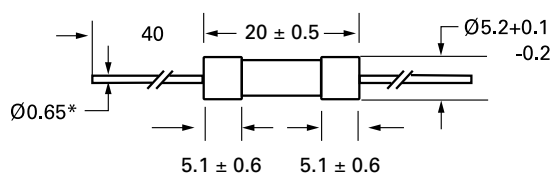
Note: These devices are not recommended for IR or Convection Reflow process.

Product Characteristics

Materials	Body: Ceramic 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 ratings Cap 2: Agency approval marks

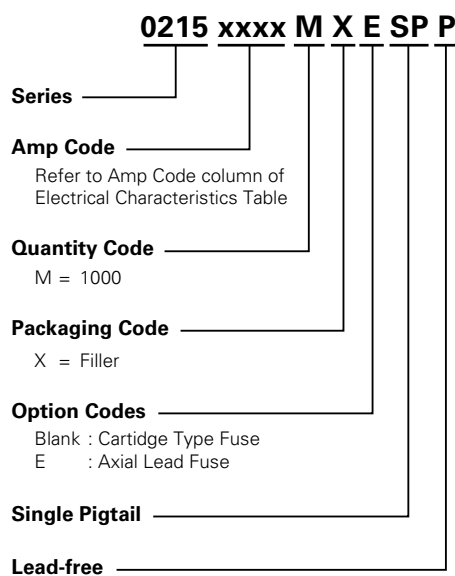
Operating Temperature	–55°C to +125°C
Thermal Shock	MIL-STD-202G, Method 107G, Test Condition B (5 cycles, –65°C to +125°C)
Vibration	MIL-STD-202G, Method 201A
Humidity	MIL-STD-202G, Method 103B, Test Condition A (High RH (95%) and elevated temp (40°C) for 240 hours)
Salt Spray	MIL-STD-202G, Method 101D,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

Dimensions



* 8A and 10A have 0.8mm diameter

Part Numbering System



Packaging

Packaging Option	Packaging Specification	Quantity	Packaging Code	Reel Size
215SP Series				
Bulk	N/A	1000	MXE	N/A