

Type 0651C/0651P

Quick-acting Fuse Series (Low Breaking Capacity)

HF Pb 0651C/ 0651P Series, 5x20mm Glass Tube Quick-acting Fuse

RoHS Compliant

Description

5x20mm Quick-acting low breaking capacity, glass tube body cartridge fuse designed, approved and refer to IEC 60127-2, standard sheet 2.

Features

- Reference IEC standard 60127-2, sheet 2
- Wide operating temperature range
- Bulk and Tape packing available
- Full compliance with EU Directive 2011/65/EU and amending directive 2015/863
- Halogen Free
- Lead Free

Applications

Provide individual protection for components or internal circuits.

- Power supplies
- Battery charger
- Monitor
- Adapter

LEAD FREE = Pb
HALOGEN FREE = HF

Physical Specifications

Materials	Body : Glass
	Cap : Nickel Plated Brass Caps
	Leads : Tin Plated Copper
Marking	On Fuse :
	"F", "Current Rating", "L", "250V",
	"bel", "Appropriate Safety Logos"
	On Label :
	"bel", "0651C" or "0651P", "F", "Current Rating", "L", "Voltage Rating", "Interrupting Rating", "Appropriate Safety Logos" and "RoHS", "CE" (China RoHS compliant).



Electrical Characteristics (Reference IEC-127-2)

Rated Current	1.5 In		2.1 In		2.75 In		4 In		10 In
	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MAX
500mA to 6.3A	1	30	50	2	10	300	20		
8A to 10A	1	30	50	2	10	400	40		
	hr.	min.	ms	sec	ms	ms	ms		

Safety Agency Approvals

Safety Agency	Safety Agency Certificate	Ampere Rating/ Voltage Rating	Ampere Range / Volt @ I.R. ability*
CULUS	E506667	500mA-10A /250V AC	500mA-10A/250V AC@35A or 10 In whichever is greater
TÜV	J 50691095 Tested according to EN 60127-1:2006+A1+A2 EN 60127-2:2014+A1	500mA-10A /250V AC	500mA-10A/250V AC@35A or 10 In whichever is greater

*I.R.= Interrupting Rating = Short Circuit Rating (Amps)

Environmental Specifications

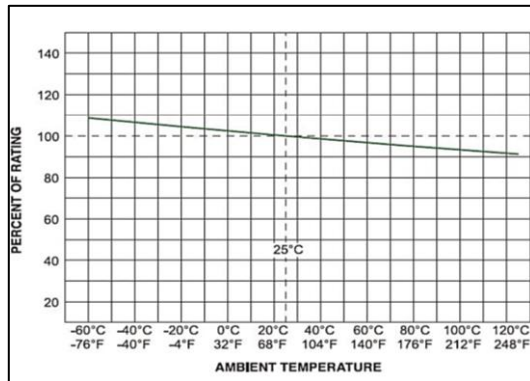
Shock Resistance	MIL-STD-202G, Method 213B, Test Condition 1 (100 G's peak for 6 milliseconds; Sawtooth waveform)
Vibration Resistance	MIL-STD-202G, Method 201A (10-55 Hz, 0.06 inch, total excursion).
Salt Spray Resistance	MIL-STD-202G, Method 101E, Test Condition B (48 hrs.)
Insulation Resistance	MIL-STD-202G, Method 302, Test Condition B (After Opening) 100,000 ohms minimum.
Solderability	MIL-STD-202G, Method 208H
Resistance to solder Heat	MIL-STD-202G, Method 210F, Test Condition B (260+/-5°C, 10+/-1 sec)
Thermal Shock	MIL-STD-202G, Method 107G, Test Condition B (-65°C to +125°C).
Operating Temperature	-55°C to +125°C
Terminal Strength	IEC-68-2-21

Electrical Specifications

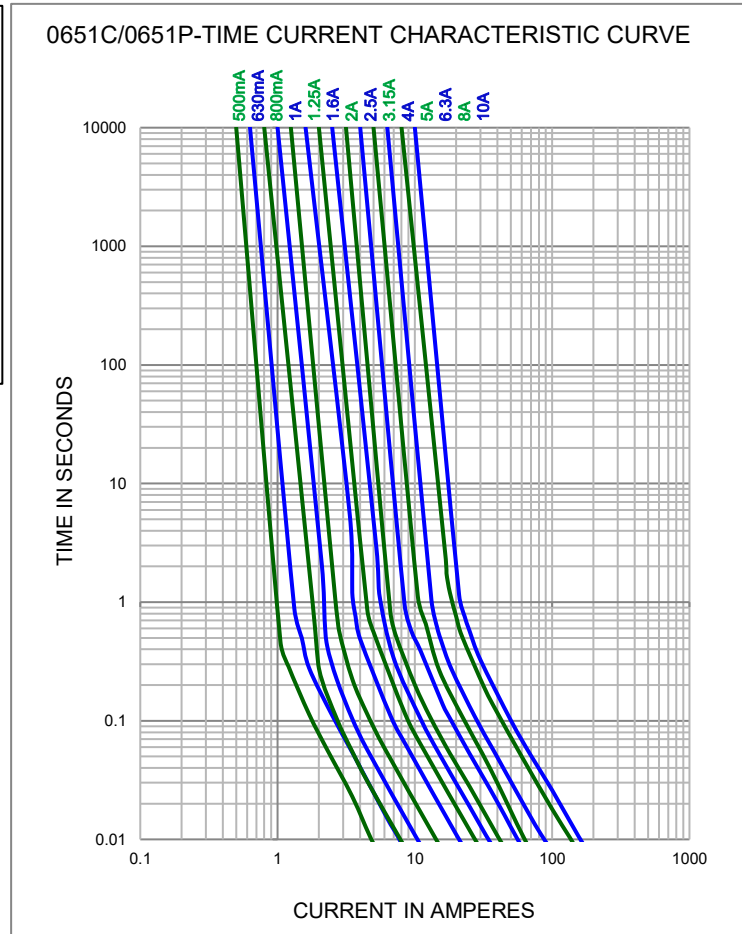
Catalog Number	Ampere Rating	Typical Cold Resistance (ohms)	Volt-drop @100%In (Volt) Max.	Voltage and Interrupting Ratings	Melting I ² T <10 mSec (A ² Sec)	Maximum Power Dissipation (W)	Agency Approvals	
								
0651C0500-XX	500mA	0.382	0.330	See Table of Safety Approvals on Page 1 for Voltage and associated Interrupting Ratings	0.230	0.165	Y	Y
0651P0500-XX							Y	Y
0651C0630-XX	630mA	0.225	0.220		0.596	0.138	Y	Y
0651P0630-XX								
0651C0800-XX	800mA	0.138	0.160		0.614	0.128	Y	Y
0651P0800-XX								
0651C1000-XX	1A	0.103	0.140		1.09	0.140	Y	Y
0651P1000-XX								
0651C1250-XX	1.25A	0.074	0.130		2.04	0.163	Y	Y
0651P1250-XX								
0651C1600-XX	1.6A	0.048	0.110		4.40	0.176	Y	Y
0651P1600-XX								
0651C2000-XX	2A	0.037	0.100		7.50	0.200	Y	Y
0651P2000-XX								
0651C2500-XX	2.5A	0.030	0.100		11.76	0.250	Y	Y
0651P2500-XX								
0651C3150-XX	3.15A	0.025	0.100		17.12	0.315	Y	Y
0651P3150-XX								
0651C4000-XX	4A	0.018	0.100		31.46	0.400	Y	Y
0651P4000-XX								
0651C5000-XX	5A	0.014	0.100		40.18	0.500	Y	Y
0651P5000-XX								
0651C6300-XX	6.3A	0.011	0.100		75.78	0.630	Y	Y
0651P6300-XX								
0651C8000-XX	8A	0.0077	0.090		187.72	0.720	Y	Y
0651P8000-XX								
0651C9100-XX	10A	0.0067	0.090		257.07	0.900	Y	Y
0651P9100-XX								

Consult manufacturer for other ratings

Temperature Derating Curve

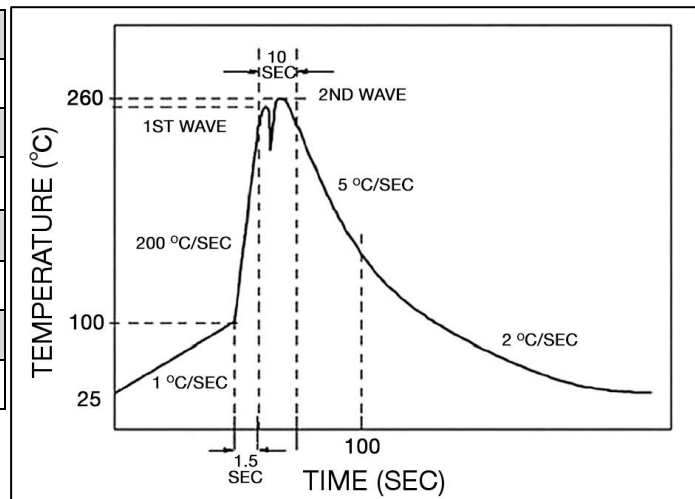


Average Time Current Curve



Soldering Parameters

Lead-free Wave Soldering Profile	
Wave Soldering Parameter	
Average ramp-up rate	200°C / second
Heating rate during preheat	typical 1 - 2°C / second Max 4°C / second
Final preheat temperature	within 125°C of soldering temperature
Peak temperature T_p	260°C
Time within +0°C / -5°C of actual peak temperature	10 seconds
Ramp-down rate	5°C / second max.



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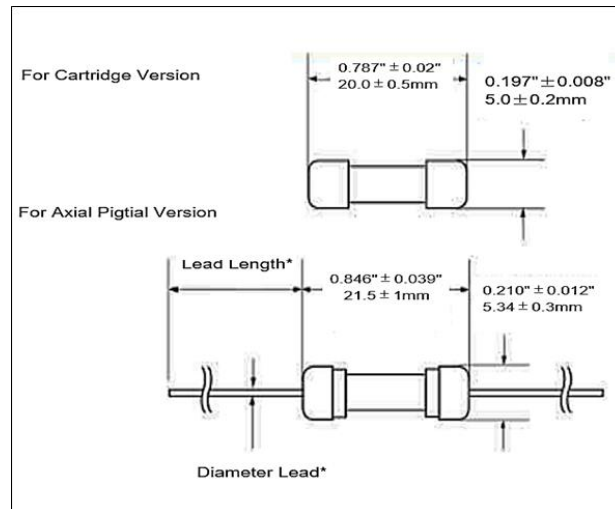
Fuse FGNO Explanation

0651X [XXXX]-XX

0651C/P=0651C/P; [XXXX]=Ampere Rating; XX=See Ordering Information as below

Milliamps	Bel FGNO[XXXX]	Amps	Bel FGNO[XXXX]	Amps	Bel FGNO[XXXX]
500	0500	1.6	1600	5	5000
630	0630	2	2000	6.3	6300
800	0800	2.5	2500	8	8000
1	1000	3.15	3150	10	9100
1.25	1250	4	4000		

Mechanical Dimensions



Ordering Information

0651 X XXXX - XX

FUSE TYPE _____
0651= 0651 Series

Mounting Tab Style _____
C = For Cartridge Version
P = For Axial Pigtail Version

AMPERE RATING _____
Refer to fuse FGNO explanation table

PACKAGING & QUANTITY CODE _____
11 = Bulk 1000/box, For cartridge version
13 = Bulk 500/box, For axial pigtail standard length
16 = 1500/box Tape & Reel (pigtail version)

*Ratings 6.3A and less have 0.032"±0.002" diameter lead, Lead length 1.5"±0.08".

*Ratings 8A and above have 0.039"±0.002" diameter lead, Lead length 1.5"±0.08".

Packaging

Packaging Option	Packaging Specification	Quantity	Packaging Code	Inside Tape Spacing
Bulk (Cartridge version)	N/A	1000	11	N/A
Bulk (Axial Pigtail version)	N/A	500	13	N/A
Tape & Reel	N/A	1500	16	10mm Pitch and 63mm



Specifications subject to change without notice

Bel Fuse Inc.
300 Executive Drive, Suite 300,
West Orange, NJ 07052 USA

+1 201.432.0463
Bel.US.CS@belf.com
belfuse.com/circuit-protection