

Type 0652C/0652P

Time-lag Fuse Series (Low Breaking Capacity)

HF Pb 0652C/ 0652P Series, 5x20mm Glass Tube Time-lag Fuse

RoHS Compliant

Description

5x20mm Time-lag, low breaking capacity, glass tube body cartridge fuse designed refers to IEC 60127-2, standard sheet 3.

Features

- Reference IEC standard 60127-2, sheet 3
- Wide operating temperature range
- Bulk and Tape & Reel 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 :
	"T", "Current Rating", "L", "250V",
	"bel", "Appropriate Safety Logos"
	On Label :
	"bel", "0652C" or "0652P", "T", "Current Rating", "L", "Voltage Rating", "Interrupting Rating", "Appropriate Safety Logos" and "RoHS", "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	MIN	MAX
500mA-12.5 A	1	2	600	10	150	3	20	300		
	hr.	min.	ms	sec	ms	sec	ms	ms		

Safety Agency Approvals

Safety Agency	Safety Agency Certificate	Ampere Rating/ Voltage Rating	Ampere Range / Volt @ I.R. ability*
UL	E506667	500mA-12.5A /250V AC	500mA-1A/250V AC@35A 1.25A-3.15A/250V AC@100A 4A-12.5A /250V AC@200A
TÜV	J 50691066 Tested according to EN 60127-1:2006+A1+A2 EN 60127-2:2014+A1		500mA-1A/250V AC@35A 1.25A-12.5A/250V AC@100A 4A-12.5A/250V AC@200A

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

Environmental Specifications

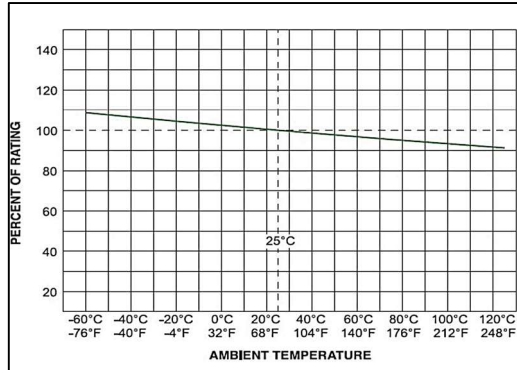
Shock Resistance	MIL-STD-202G, Method 213B, Test Condition 1 (100 G's peak for 6 milliseconds; Sawtooth waveform)
Vibration Resistance	MIL-STD-202G, Method 201A (10-55 Hz, 0.06 inch, total excursion).
Salt Spray Resistance	MIL-STD-202G, Method 101E, Test Condition B (48 hrs.)
Insulation Resistance	MIL-STD-202G, 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

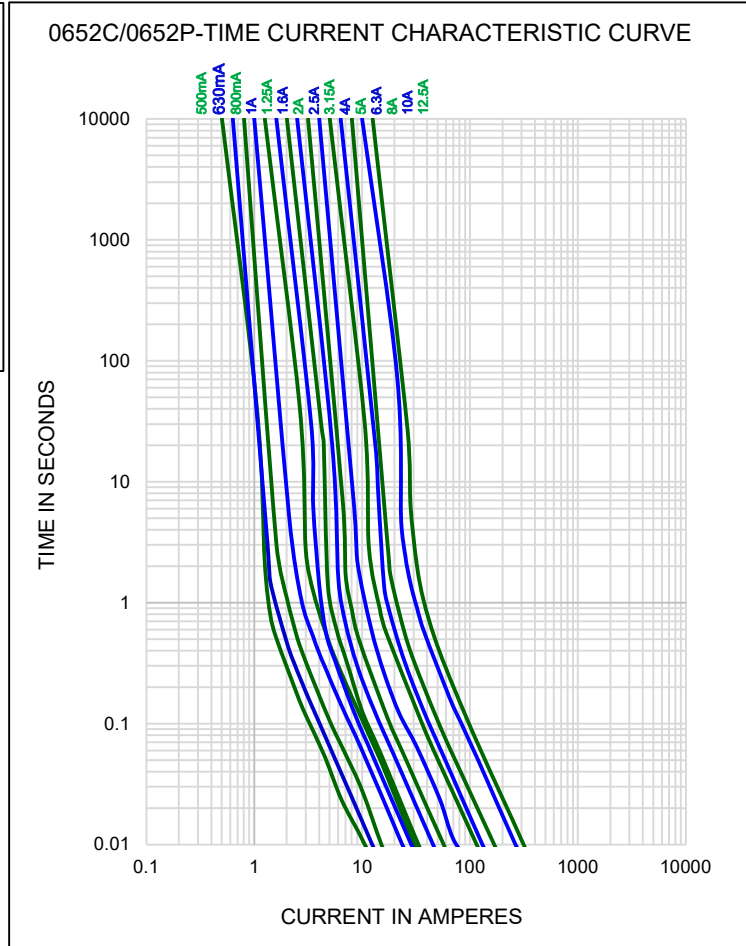
Catalog Number	Ampere Rating	Typical Cold Resistance (ohms)	Volt-drop @100%In (Volt) max.	Voltage and Interrupting Ratings	Melting I ² T <10 mSec (A ² Sec)	Maximum Power Dissipation (W)	Agency Approvals	
								
0652C0500-XX	500mA	0.19	0.130	See Table of Safety Approvals on Page 1 for Voltage and associated Interrupting Ratings	1.11	0.065	Y	Y
0652P0500-XX								
0652C0630-XX	630mA	0.15	0.130		1.50	0.082	Y	Y
0652P0630-XX								
0652C0800-XX	800mA	0.10	0.110		2.27	0.088	Y	Y
0652P0800-XX								
0652C1000-XX	1A	0.078	0.110		5.52	0.110	Y	Y
0652P1000-XX								
0652C1250-XX	1.25A	0.052	0.090		10.13	0.113	Y	Y
0652P1250-XX								
0652C1600-XX	1.6A	0.040	0.090		8.15	0.144	Y	Y
0652P1600-XX								
0652C2000-XX	2A	0.032	0.090		10.98	0.180	Y	Y
0652P2000-XX								
0652C2500-XX	2.5A	0.024	0.090		20.52	0.225	Y	Y
0652P2500-XX								
0652C3150-XX	3.15A	0.019	0.090		32.36	0.284	Y	Y
0652P3150-XX								
0652C4000-XX	4A	0.014	0.080		54.39	0.320	Y	Y
0652P4000-XX								
0652C5000-XX	5A	0.010	0.080		132.25	0.400	Y	Y
0652P5000-XX								
0652C6300-XX	6.3A	0.0085	0.080		169.00	0.504	Y	Y
0652P6300-XX								
0652C8000-XX	8A	0.0070	0.080		281.60	0.640	Y	Y
0652P8000-XX								
0652C9100-XX	10A	0.0050	0.080		534.29	0.800	Y	Y
0652P9100-XX								
0652C9125-XX	12.5A	0.0042	0.080		883.05	1.000	Y	Y
0652P9125-XX								

Consult manufacturer for other ratings

Temperature Derating Curve

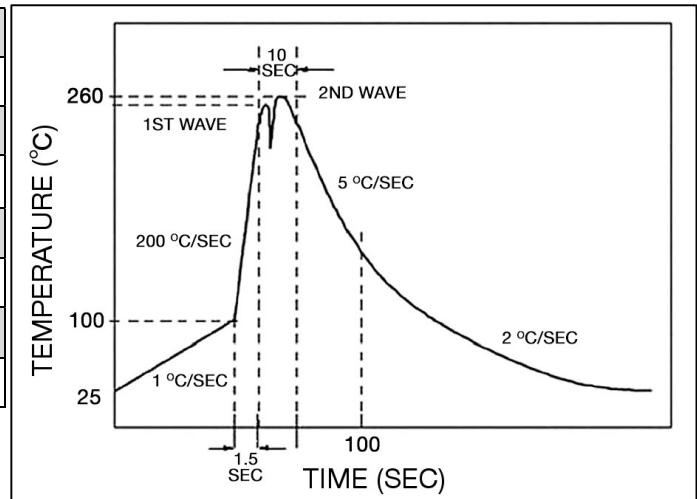


Average Time Current Curve



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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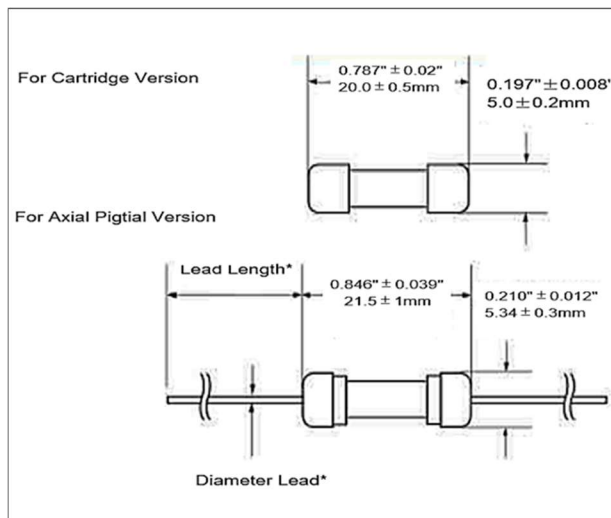
Fuse FGNO Explanation

0652X [XXXX]-XX

0652C/P=0652C/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	12.5	9125

Mechanical Dimensions



Ordering Information

0652 X XXXX - XX

FUSE TYPE _____
0652= 0652 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" $\pm$ 0.002" diameter lead, Lead length 1.5" $\pm$ 0.08".

*Ratings 8A and above have 0.039" $\pm$ 0.002" diameter lead, Lead length 1.5" $\pm$ 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

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