

62mA-400mA EOL – Last Buy Date is Jun 30, 2020
 No replacements for these ratings

Type GSA / GSAP

Slow Blow Fuse Series

HF **Pb** GSA/GSAP Series, 6x32mm Ceramic Tube Slow Blow Fuse

RoHS 2 Compliant

Description

6x32mm Slow Blow, ceramic tube body cartridge fuse designed, approved and complied with UL and CSA standard 248-14.

Features

- Meet UL and CSA standard 248-14
- Wide operating temperature range
- Bulk packing available
- RoHS 2 compliant
- 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 : Ceramic
	Cap : Nickel Plated Brass Caps
	Leads : Matte Tin Plated Copper
Marking	On Fuse :
	"bel", "GSA", "Current Rating", "Voltage Rating", "Appropriate Safety Logos", "✓" (RoHS 2 compliant)
	On Label :
	"bel", "GSA" or "GSAP", "Current Rating", "Voltage Rating", "Interrupting Rating", "Appropriate Safety Logos" and " ^{RoHS} ✓ ", "  "(China RoHS compliant).

Electrical Characteristics (UL/CSA STD.248-14)

Testing Current	Blow Time	
	Minimum	Maximum
100%	4 hrs.	N/A
135%	N/A	1 Hr.
200%	5 sec	30 sec

Safety Agency Approvals

Safety Agency	Safety Agency Certificate	Voltage Rating (V)	Ampere Range / Volt @ I.R. ability*
 	E20624 LR39772	63mA-15A/ 250V AC	63mA-8A/125V AC @10,000A 63mA-1A/250V AC @35A >1A-3.5A/250V AC @100A >3.5A-8A/250V AC @200A
 			10A-15A/125V AC @10,000A 10A-15A/250V AC @750A
	JET1037-31003-1010 JET1037-31003-1011		1A-5A/125V AC @500A
	JET1037-31003-1007		>5A-15A/125V AC @300A

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

Type GSA / GSAP

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 A (After Opening) 10,000 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)	Melting I ² T @10 In (A ² Sec)	Maximum Power Dissipation (W)	Agency Approvals					
								UL US	SP	UL US	SP	CS	
GSA(P) 63-R	63mA	75.5	7.33	See Table of Safety Approvals on Page 1 for Voltage and associated Interrupting Ratings	0.087	0.098	0.71	Y	Y				
GSA(P) 80-R	80mA	48.4	6.27		0.135	0.152	0.74	Y	Y				
GSA(P) 100-R	100mA	29.4	4.41		0.209	0.238	0.55	Y	Y				
GSA(P) 125-R	125mA	17.5	3.45		0.323	0.372	0.58	Y	Y				
GSA(P) 160-R	160mA	12.3	3.13		0.499	0.581	0.60	Y	Y				
GSA(P) 200-R	200mA	7.1	2.13		0.773	0.908	0.63	Y	Y				
GSA(P) 250-R	250mA	5.0	1.97		1.2	1.4	0.66	Y	Y				
GSA(P) 300-R	300mA	3.17	1.52		1.9	2.2	0.70	Y	Y				
GSA(P) 375-R	375mA	2.14	1.26		2.6	3.2	0.73	Y	Y				
GSA(P) 500-R	500mA	1.38	1.07	See Table of Safety Approvals on Page 1 for Voltage and associated Interrupting Ratings	4.4	5.4	0.78	Y	Y				
GSA(P) 600-R	600mA	1.05	0.98		6.9	8.5	0.82	Y	Y				
GSA(P) 700-R	700mA	0.648	0.69		8.5	11	0.84	Y	Y				
GSA(P) 750-R	750mA	0.642	0.68		10	12	0.85	Y	Y				
GSA(P) 1-R	1A	0.374	0.59		16	21	0.91	Y	Y				Y
GSA(P) 1.25-R	1.25A	0.248	0.43		25	32	0.96	Y	Y				Y
GSA(P) 1.6-R	1.6A	0.155	0.38		39	50	1.01	Y	Y				Y
GSA(P) 2-R	2A	0.115	0.36		61	79	1.06	Y	Y				Y
GSA(P) 2.5-R	2.5A	0.079	0.29		94	123	1.12	Y	Y				Y
GSA(P) 3-R	3A	0.058	0.27		146	192	1.18	Y	Y				Y
GSA(P) 4-R	4A	0.039	0.23		226	300	1.24	Y	Y				Y
GSA(P) 5-R	5A	0.029	0.22		349	469	1.31	Y	Y				Y
GSA(P) 6-R	6A	0.018	0.19		286	455	1.61	Y	Y				Y
GSA(P) 7-R	7A	0.016	0.18		372	592	1.81	Y	Y				Y
GSA(P) 8-R	8A	0.013	0.17		483	769	1.95	Y	Y				Y
GSA(P) 10-R	10A	0.010	0.17	817	1300	2.26			Y	Y	Y		
GSA(P) 12-R	12A	0.008	0.15	1277	2031	2.56			Y	Y	Y		
GSA(P) 15-R	15A	0.006	0.15	2123	3377	2.96			Y	Y	Y		

Consult manufacturer for other ratings

EOL—
 Last Buy Date is
 Jun 30, 2020



Specifications subject to change without notice

Bel Fuse Inc.
 206 Van Vorst Street
 Jersey City, NJ 07302 USA

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

Type GSA / GSAP

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 Tp	260°C
Time within +0°C / -5°C of actual peak temperature	10 seconds
Ramp-down rate	5°C / second max.



Specifications subject to change without notice

Bel Fuse Inc.
 206 Van Vorst Street
 Jersey City, NJ 07302 USA

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

Type GSA / GSAP

Fuse FGNO Explanation

06X6 R [XXXX] -XX

0606R=GSA/0616R=GSAP; [XXXX]=Ampere Rating; XX=See Ordering Information as below

Fraction	Decimal	Milliamps	Bel FGNO[XXXX]
1/16	0.063	63	0063
8/100	.080	80	0080
1/10	.100	100	0100
1/8	.125	125	0125
	.160	160	0160
2/10	.200	200	0200
1/4	.250	250	0250
3/10	.300	300	0300
3/8	.375	375	0375
1/2	.500	500	0500
6/10	.600	600	0600
7/10	.700	700	0700
3/4	.750	750	0750

Fraction	Decimal	Amps	Bel FGNO[XXXX]
	1.0	1	1000
1-1/4	1.25	1.25	1250
	1.60	1.6	1600
	2.0	2	2000
2-1/2	2.5	2.5	2500
	3.0	3	3000
	4.0	4	4000
	5.0	5	5000
	6.0	6	6000
	7.0	7	7000
	8.0	8	8000
		10	9100
		12	9120
		15	9150

Mechanical Dimensions



*Diameter lead 0.032"±0.002" for 5A and less
 *Diameter lead 0.039"±0.002" for 6A and above

Ordering Information

06X6 R XXXX - X X

FUSE TYPE _____

0606R = GSA Series

0616R = GSAP Series

R = RoHS Compliant _____

AMPERE RATING _____

Refer to fuse FGNO explanation table

PACKAGING CODE _____

3 = GSA Cartridge, 1K/box

3 = GSAP Pigtail, Bulk, 1K/box

VOLTAGE CODE _____

3 = 250V for 100mA -20A

Packaging

Packaging Option	Packaging Specification	Quantity	Packaging Code	Inside Tape Spacing
Bulk	N/A	1000	33	N/A
Bulk (Pigtail Type)	N/A	1000	33	N/A



Specifications subject to change without notice

Bel Fuse Inc.
 206 Van Vorst Street
 Jersey City, NJ 07302 USA

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

Данный компонент на территории Российской Федерации

Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: info@moschip.ru

Skype отдела продаж:

moschip.ru

moschip.ru_4

moschip.ru_6

moschip.ru_9