Not recommended for new applications. Please see 0679L

Type SSQ

Square Ceramic Surface Mount Quick Acting Fuse

HF Pb SSQ Series – 2410 Size RoHS 2 Compliant

Features

- Quick Acting
- Small size, 2410 SMD
- Wide range of current rating from 100mA to 15A
- Wide operating temperature range
- Tape & Reel for auto-insert SMD process
- Compatible with 260℃, IR Pb-free solder process
- RoHS 2 compliant (MSL = 1)
- Halogen Free
- Lead Free

Applications

- Notebook
- LCD monitor
- PC computer
- Office electronic equipment
- Industrial equipment
- Medical equipment
- POE, POE+
- LCD / LED monitor
- Power supply
- LCD / LED TV

LEAD FREE = Pb
HALOGEN FREE = HF

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

Testing Current	Blow Time	
	Minimum	Maximum
100%	4 Hrs.	N/A
200%	N/A	5 Sec

Safety Agency Approvals

Safety Agency	Safety Agency Certificate	Voltage Rating (V)	Ampere Range / Volt @ I.R. ability*
	LR39772	100mA-7A/125V AC 125V DC 7.1A-12A/125V AC 86V DC 15A/86V DC	100mA-7A/125V @50A AC
	E20624		100mA-7A/125V @ 50A AC 86V @ 10kA DC 125V @ 300A DC 7.1A-12A/125V @ 50A AC 86V @ 10kA DC
	E20624		15A/86V @ 10kA DC
*I.R.= Interrupting Rating = Short Circuit Rating(Amps)			

Physical Specifications

Materials	Body : Ceramic
	Terminations : Palladium plated Brass Caps
Marking	On Fuse :
	"Current Rating" in black color, "bel" stamped in end caps.
	On Label :
	"bel", "SSQ", "Current Rating", "Voltage Rating", "Interrupting Rating", "Appropriate Safety Logos" and " RoHS ✓ ", " e "(China RoHS compliant).

Specifications subject to change without notice

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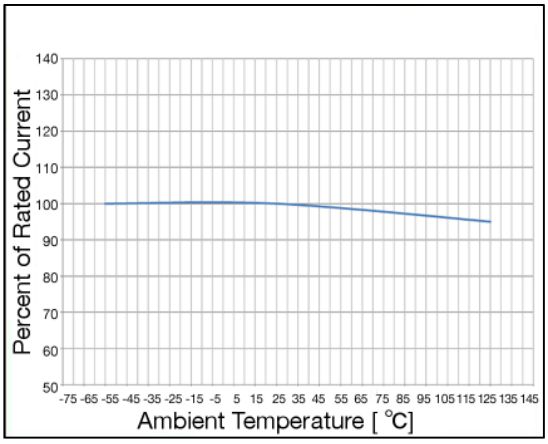
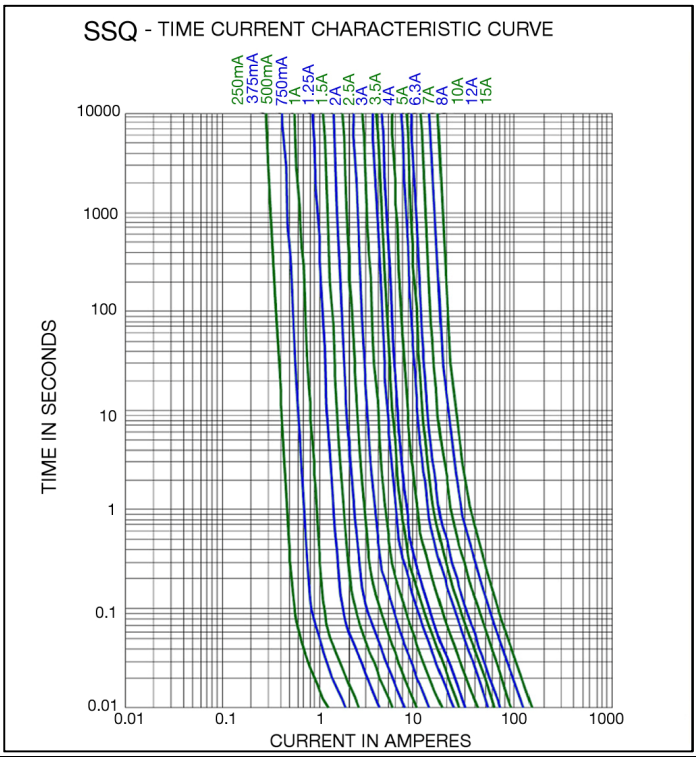
Temperature Derating Curve



Average Time Current Curve



Electrical Specifications

Catalog Number	Ampere Rating	Typical Cold Resistance (ohms)	Volt-drop @100% In (Volt) max.	Voltage and Interrupting Ratings	Melting I²T <10 m Sec (A² Sec)	Melting I²T @10 In (A² Sec)	Maximum Power Dissipation (W)	Agency Approvals		
								c UL us	CSA	c TÜV us
SSQ 250	250mA	0.560	0.30	See Table of Safety Approvals on Page 1 for Voltage and associated Interrupting Ratings	0.02	0.01	0.07	Y	Y	
SSQ 375	375mA	0.335	0.27		0.04	0.03	0.09	Y	Y	
SSQ 500	500mA	0.235	0.26		0.07	0.06	0.11	Y	Y	
SSQ 750	750mA	0.131	0.19		0.11	0.07	0.13	Y	Y	
SSQ 1	1A	0.081	0.14		0.19	0.14	0.17	Y	Y	
SSQ 1.25	1.25A	0.065	0.14		0.33	0.24	0.20	Y	Y	
SSQ 1.5	1.5A	0.056	0.14		0.57	0.41	0.23	Y	Y	
SSQ 2	2A	0.039	0.13		1.0	0.8	0.30	Y	Y	
SSQ 2.5	2.5A	0.031	0.13		1.7	1.4	0.36	Y	Y	
SSQ 3	3A	0.025	0.13		3.0	2.4	0.43	Y	Y	
SSQ 3.5	3.5A	0.024	0.13		3.9	3.3	0.47	Y	Y	
SSQ 4	4A	0.019	0.13		5.1	4.4	0.51	Y	Y	
SSQ 5	5A	0.013	0.12		8.8	7.8	0.62	Y	Y	
SSQ 6.3	6.3A	0.011	0.12		15	14	0.74	Y	Y	
SSQ 7	7A	0.009	0.110		20	19	0.81	Y	Y	
SSQ 8	8A	0.008	0.110		26	25	0.89	Y		
SSQ 10	10A	0.007	0.110		46	44	1.07	Y		
SSQ 12	12A	0.005	0.100		70	69	1.24	Y		
SSQ 15	15A	0.004	0.100		121	124	1.54			Y

Consult manufacturer for other ratings

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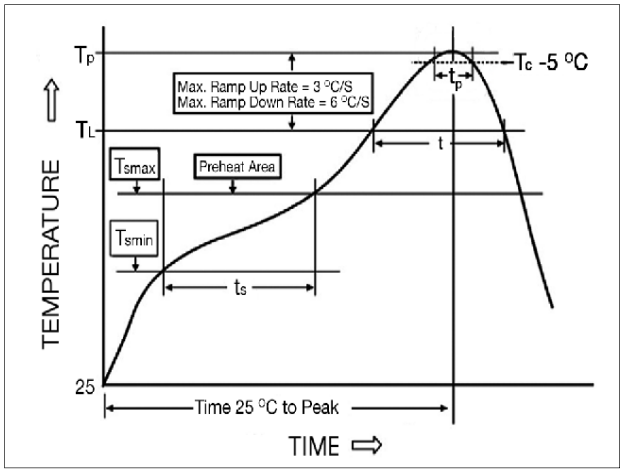
Environmental Specifications

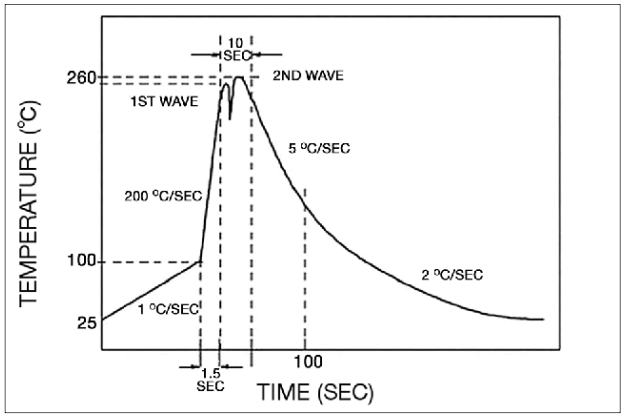
Shock Resistance	MIL-STD-202G, Method 213B, Test Condition 1 (100 G's peak for 6 milliseconds; Sawtooth waveform)
Vibration Resistance	MIL-STD-202G, Method 201A (10-55 Hz, 0.06 inch, total excursion).
Salt Spray Resistance	MIL-STD-202G, Method 101E, Test Condition B (48 hrs).
Insulation Resistance	MIL-STD-202G, 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 C. Top Side (260℃, 20 sec) MIL-STD-202G, Method 210F, Test Condition D. Bottom Side (260℃,10 sec)
Thermal Shock	MIL-STD-202G, Method 107G, Test Condition B (-65℃ to +125℃).
Operating Temperature	-55℃ to +125℃
Moisture Sensitivity Level	1 (According to IPC J-Std-020)

Soldering Parameters

IR Reflow Profile (IPC/JEDEC J-STD-020D)	
Preheat & Soak Temperature min (Tsmin) Temperature max (Tsmax) Time (Tsmin to Tsmax) (ts)	 150℃ 200℃ 60-120 seconds
Average ramp-up rate (Tsmax to Tp)	3℃/second max.
Liquidous temperature (TL) Time at liquidous (tL)	217℃ 60-150 seconds
Peak temperature (Tp)	260℃ max
Time (tp) within 5℃ of the specified classification temperture (Tc)	30 seconds
Average ramp-down rate (Tp to Tsmax)	6℃/second max.
Time 25℃ to peak temperature	8 minutes max.



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



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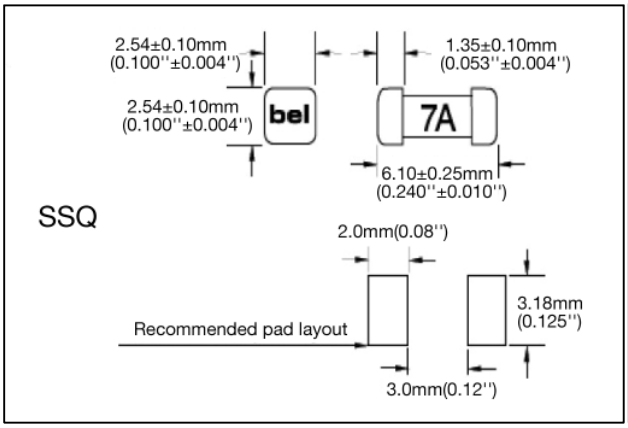
Fuse FGNO Explanation
0679 - [XXXX] - XX
0679-=SSQ; [XXXX]=Ampere Rating; XX=See Ordering Information as below

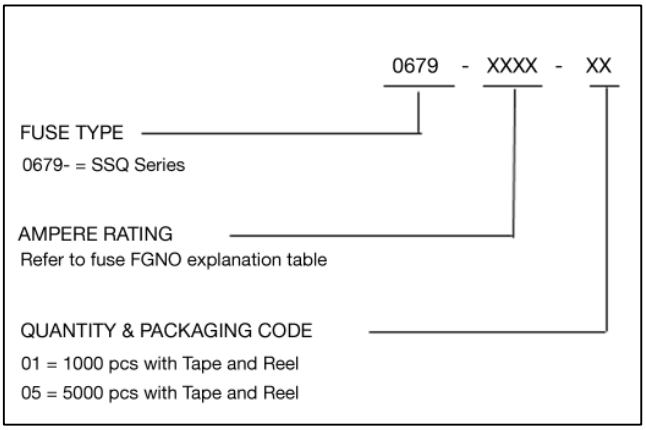
Fraction	Decimal	Milliamps	Bel FGNO[XXXX]
1/4	0.250	250	0250
3/8	.375	375	0375
1/2	.500	500	0500
3/4	.750	750	0750

Fraction	Decimal	Amps	Bel FGNO[XXXX]
	1.0	1	1000
1-1/4	1.25	1.25	1250
1-1/2	1.5	1.5	1500
	2.0	2	2000
2-1/2	2.5	2.5	2500
	3.0	3	3000
3-1/2	3.5	3.5	3500
	4.0	4	4000
	5.0	5	5000
	6.3	6.3	6300
	7.0	7	7000
	8.0	8	8000
		10	9100
		12	9120
		15	9150

Mechanical Dimensions



Ordering Information



Packaging

Packaging Tape & Reel	Packaging Specification	Quantity	Quantity & Packaging Code
12 mm wide tape with 13 inches Diameter reel	EIA Standard 481-E	5000	05
12 mm wide tape with 7 inches Diameter reel	EIA Standard 481-E	1000	01

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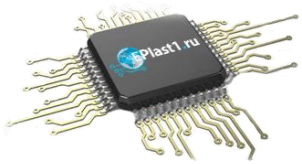
Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits,General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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