RoHS

C1S May2012D

Type C1S

Surface Mount Slow Blow Chip Fuse

1206 Size

RoHS 6 Compliant

C1S Series Fuse



Features

- Slow Blow
- Small size,1206 SMD
- Current rating from 750mA to 5A
- Wide operating temperature range from -55ºC to 125ºC
- Tape and Reel for automatic SMD placement
- Compatible with reflow and wave soldering
- RoHS6 compliant
- Halogen Free HF
- Leadfree Pb

Applications

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

HALOGEN FREE = HF

LEAD FREE = Pb

Electrical Characteristics (UL STD.248-14)

Testing current	Blow Time	
	Minimum	Maximum
100%	4 hrs.	N/A
200%	1 sec	120 sec
300%	0.1 sec	3 sec
800%	0.002 sec	0.05 sec

Safety Agency Approvals

SAFETY AGENCY	SAFETY AGENCY CERTIFICATE	AMPERE RANGE / VOLT @ I.R.ABILITY
c UL us	E20624	750mA - 5A / 63V AC & DC @ 50A
CE		

Specifications Subject to change without notice.

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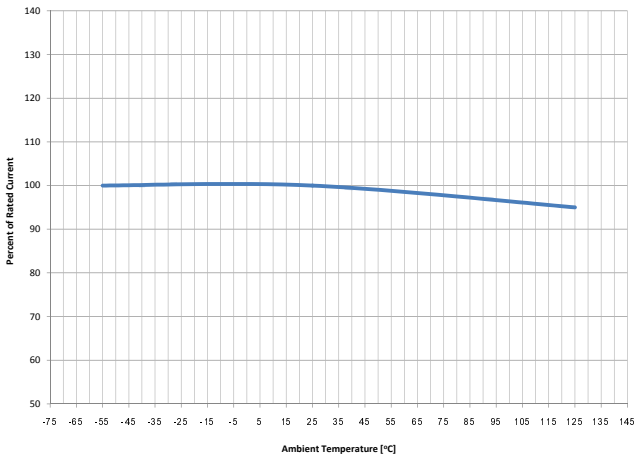
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C1S May2012C

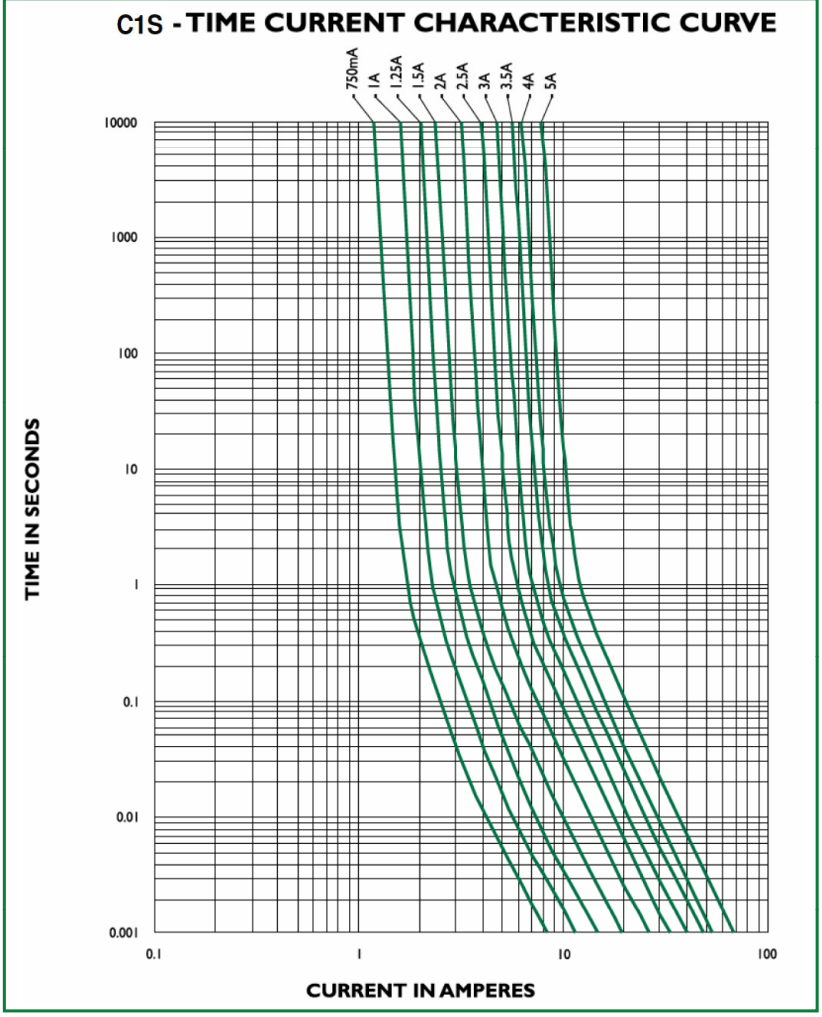
Electrical Specifications

Catalog Number	Ampere Rating (A)	Nominal Cold Resistance (ohm)	Nominal Volt-drop @100% In (volt)	Interrupting Rating	Max. Voltage Rating (V)	Melting I2T @ 10 In (A2 Sec)	Nominal Power Dissipation @100% In (W)	Agency Approvals	
C1S 750	750mA	0.350	0.333	750mA - 5A / 63V AC & DC @ 50A	63	0.07	0.25	Y	Y
C1S 1	1A	0.285	0.349		63	0.12	0.35	Y	Y
C1S 1.25	1.25A	0.225	0.346		63	0.18	0.43	Y	Y
C1S 1.5	1.5A	0.182	0.348		63	0.27	0.52	Y	Y
C1S 2	2A	0.105	0.254		63	0.50	0.51	Y	Y
C1S 2.5	2.5A	0.072	0.221		63	0.75	0.55	Y	Y
C1S 3	3A	0.050	0.182		63	1.12	0.55	Y	Y
C1S 3.5	3.5A	0.040	0.171		63	1.69	0.60	Y	Y
C1S 4	4A	0.032	0.160		63	2.07	0.64	Y	Y
C1S 5	5A	0.022	0.140		63	3.10	0.70	Y	Y

Temperature Derating Curve



Average Time Current Curve



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Type C1S

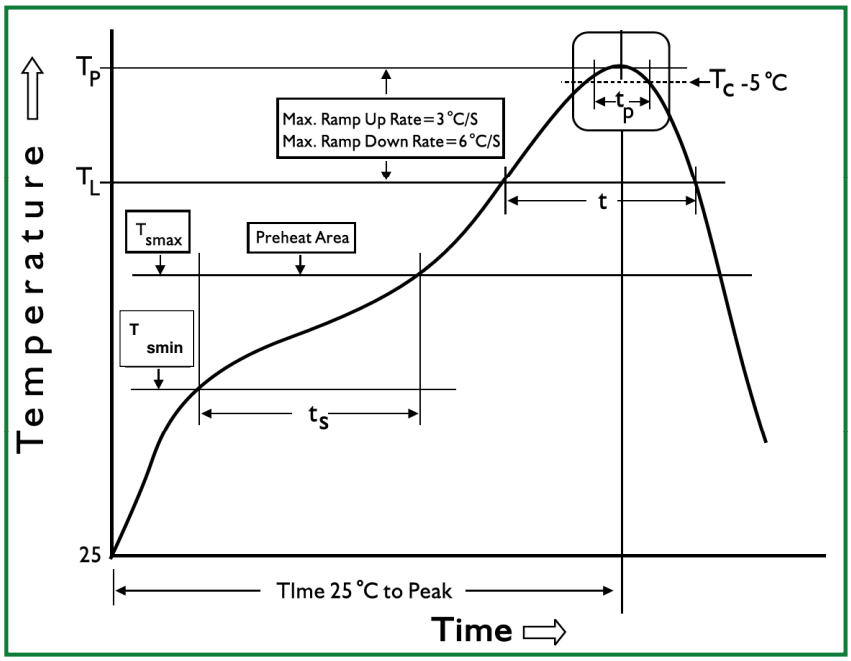
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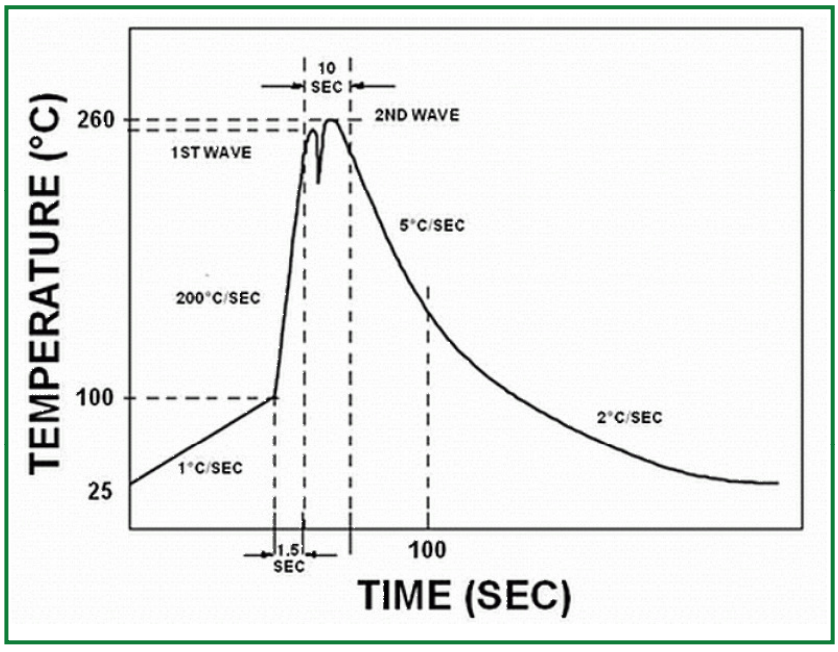
RoHS 6 Compliant

Soldering Parameters

Lead-Free IR Reflow Profile (IPC/JEDEC J-STD-020D)	
Reflow Parameter	
Minimum preheat temperature (TsMIN)	150 °C
Maximum preheat temperature (TsMAX)	200 °C
Preheat Time	60-180 seconds
TsMAX to TL ramp-up rate	3 °C/second max.
Time above temperature TL (tL)	217°C 60-120 seconds
Peak Temperature (TP)	260 °C max.
Time within 5° of Peak TP	20-40 seconds
Ramp-down rate	6 °C/second max.



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.



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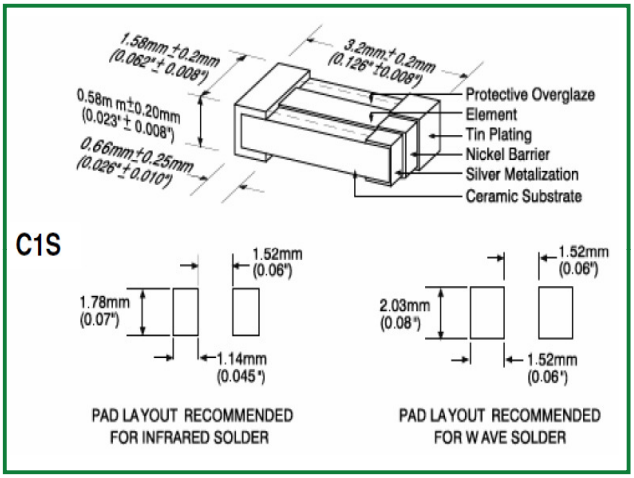
Physical Specifications

Materials	Body : Ceramic Substrate
	Terminations: Ag / Ni / Sn (100% Lead -free)
	Element Cover Coating : Lead-free Glass
Marking	On Fuse:
	None
	On label:
	"bel" , "C1S", "Current Rating","Voltage Rating","Interrupting Rating", "Appropriate Safety Logos" and " ","(China RoHS compliant).

Environmental Specifications

Shock Resistance	MIL-STD-202G, Method 213B, Test Condition I (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℃

Mechanical Dimensions



Ordering Information

0685 - XXXX - XX

FUSE TYPE
0685

AMPERE RATING
Refer to fuse FGNO explanation table

QUANTITY & PACKAGING CODE
S1 = 5000 pcs with Tape and Reel

Packaging

Packaging Tape & Reel	Packaging Specification	Quantity	Quantity & Packaging Code
8 mm wide tape with 7 inches Diameter reel	EIA Standard 481-D	5000	0685-XXXX-S1

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