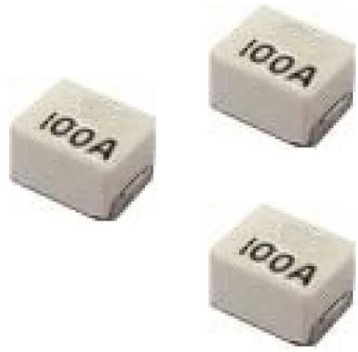
Type 4SF-S

RoHS

High-Current Chip Fuse

E356490



Electrical Characteristic

Cartridge Catalog Number	Ampere Rating [In]	Voltage Rating (V)	Nominal Resistance Cold Ohms	Nominal Melting I^2t A^2 Sec
4SF-S020	20A	80 V or less	0.0020	108.72
4SF-S030	30A		0.0012	270.70
4SF-S 040	40A		0.0008	416.35
4SF-S050	50A		0.0006	750.04
4SF-S060	60A		0.0004	1258.1
4SF-S 080	80A		0.0003	3110.1
4SF-S100	100A		0.0002	7570.6

⋆ For less than 20A'S Information please contact us.

Approval

Recognized Component for Canada and U.S. 40mA~100A

Electrical Characteristic

Rated Current	1 In MIN	2.5 In MAX
40mA~100A	4 hr	60 sec

Environmental Temperature at 25°C

Interrupting Rating

40mA~100A: 450 amperes at 80V DC

Physical Specification

Material

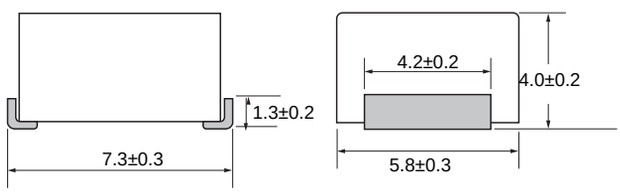
Body: Ceramic

Terminations:Tin-plated Copper

Packaging

1000 pcs(13") in an inner box.

Mechanical Dimension(mm)



Environmental Specification

Operating Temperature

-55°C to +125°C

Vibration

MIL-STD-202G, Method 201 (10-55 Hz, 0.06 inch, total excursion)

Salt Spray

MIL-STD-202G, Method 101, Test Condition B (48Hrs)

Moisture Resistance

MIL-STD-202G, Method 106, High Humidity(90-98% RH), Heat(65°C)

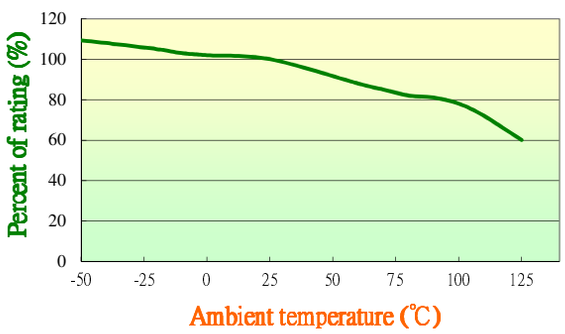
Resistance to Solder Heat

MIL-STD-202G, Method 210, Test Condition B (10sec, at 260°C)

Thermal Shock

MIL-STD-202G, Method 107, Test Condition B (-65°C to +125°C)

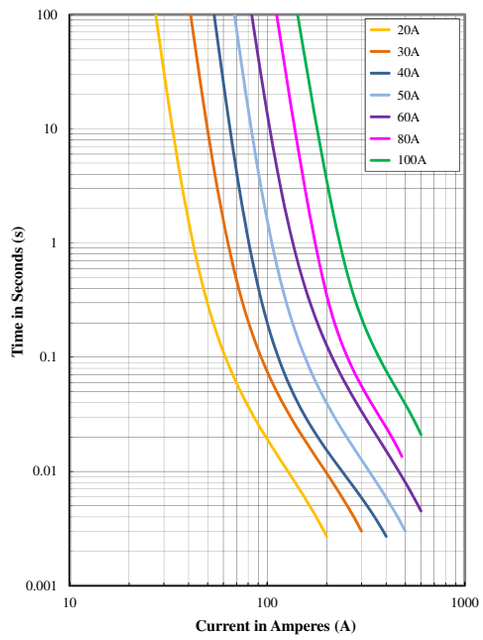
Temperature Rerating Curve



Note:

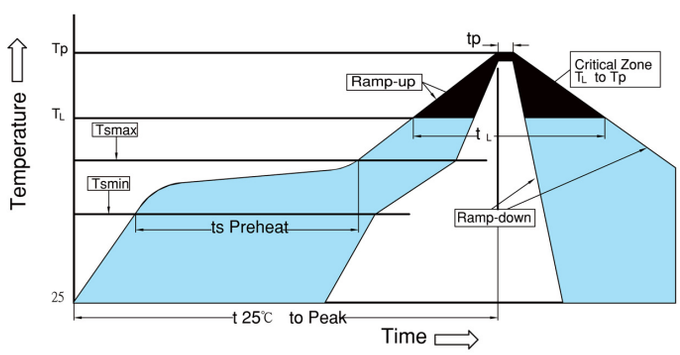
1. Derating depicted in this curve is in addition to the standard derating of 25% for continuous operation.

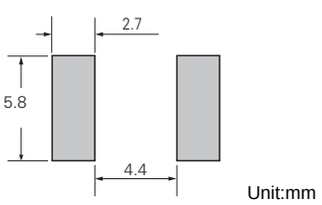
Average Time Current Curves

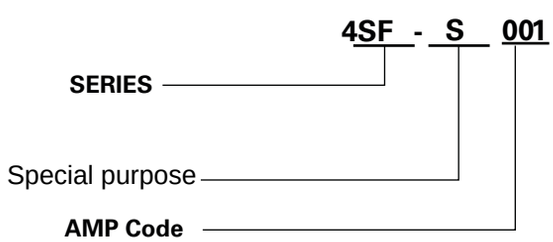


Soldering Parameters

Reflow Condition		Pb-free assembly
Pre Heat	Temperature Min ($T_{s\ (min)}$)	150℃
	Temperature Max ($T_{s\ (max)}$)	200℃
	Time (Min to Max) (t_s)	60-180 seconds
Average Ramp-up Rate (Liquidus Temp (T_L) to peak)		3℃/second max
$T_{s\ (max)}$ to T_L -Ramp-up Rate		5℃/second max
Reflow	Temperature (T_L) (Liquidus)	217℃
	Time (t_L)	60-150 second
Peak Temperature (T_P)		$260^{+0/-5℃}$
Time within 5℃ of actual peak Temperature (t_p)		10 ~ 30 seconds
Ramp-down Rate		6℃/second max
Time 25℃ to peak Temperature (t 25℃ to peak)		8 minutes man
Do not exceed		260℃





Recommended Pad Layout

Part Numbering System