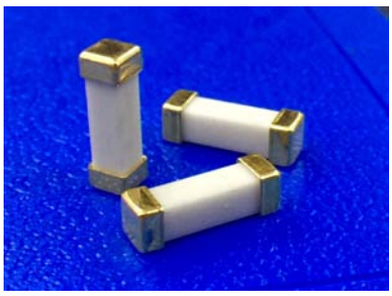
Type VF465

RoHS

Slow Blow Square Ceramic Surface Mount Fuse

E356490



Electrical Characteristic

Cartridge Catalog Number	Ampere Rating [In]	Voltage Rating (V)	Nominal Resistance Cold Ohms	Nominal Melting I^2t A^2 Sec
VF465 .040	40 mA	250 V or less	1.0433	0.3415
VF465 .050	50 mA		0.7161	0.4523
VF465 .063	63 mA		0.4901	1.1201
VF465 .800	800 mA		0.3332	2.1024
VF465 001	1 A		0.2310	3.4465
VF465 1.25	1.25 A		0.1408	3.1401
VF465 1.60	1.6 A		0.0928	5.3231
VF465 002	2 A		0.0609	11.526
VF465 2.50	2.5 A		0.0450	21.010
VF465 3.15	3.15 A		0.0286	43.120
VF465 004	4 A		0.0183	48.116
VF465 005	5 A		0.0122	99.085
VF465 6.30	6.3 A		0.0086	165.42
VF465 008	8 A		0.0046	174.71
VF465 010	10 A		0.0040	198.12
VF465 015	15 A		0.0030	210.12
VF465 020	20 A		0.0027	332.51
VF465 025	25 A		0.0021	468.34
VF465 030	30 A		0.0019	616.45
VF465 040	40 A		0.0015	832.51
VF465 050	50 A		0.0009	915.12
VF465 060	60 A		0.0005	985.65
VF465 070	70 A	125 V or less	0.00047	1252.4
VF465 080	80 A		0.00042	1477.6
VF465 090	90 A		0.00039	2015.5
VF465 100	100 A		0.00031	4361.2

Approval

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

Electrical Characteristic

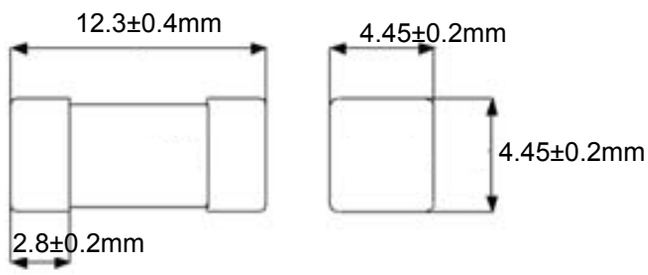
Rated Current	1In	1.25 In	2 In		10 In	
	MIN	MIN	MIN	MAX	MIN	MAX
40mA~10A	—	1 hr	—	120 sec	10ms	100ms
15A~100A	4 hr	—	1sec	120 sec	—	—

Environmental Temperature at 25°C

Interrupting Rating

40mA~16A: 500 amperes at 250V DC/AC
16A~60A: 200 amperes at 250V DC/AC
40mA~100A: 300 amperes at 125V DC/AC

Mechanical Dimension(mm)



Physical Specification

Material

Body: Ceramic

Terminations: Silver plated brass caps
-G: Gold plated brass caps

Packaging

1000 pcs in 13inches dia.Reel.

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)

Insulation Resistance

MIL-STD-202G, Method 302, Test Condition A

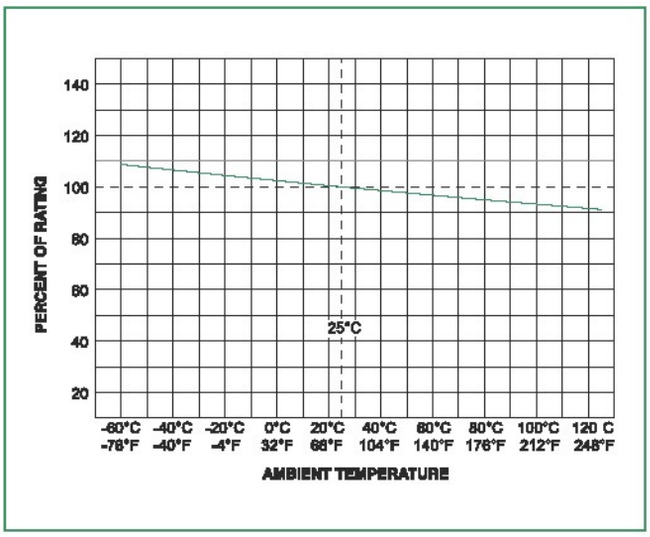
Resistance to Solder Heat

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

Thermal Shock

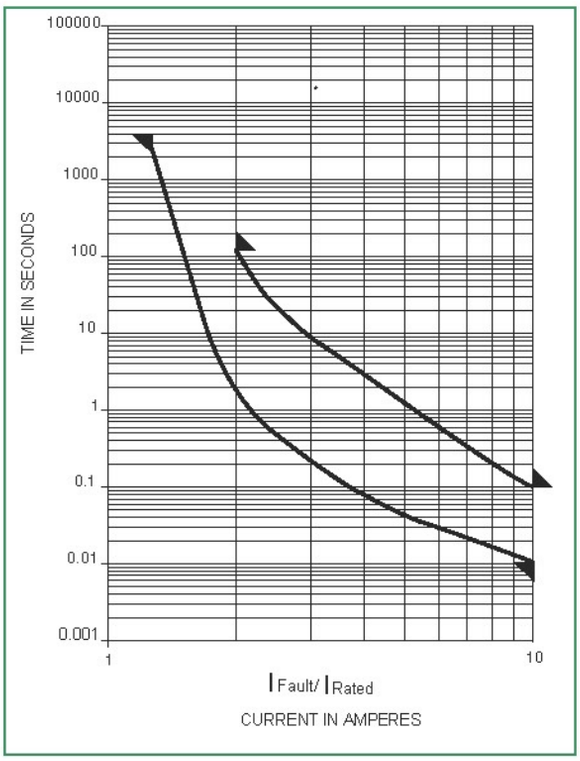
MIL-STD-202G, Method 107, Test Condition B (-65°C to +125°C)

Temperature Rerating Curve



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

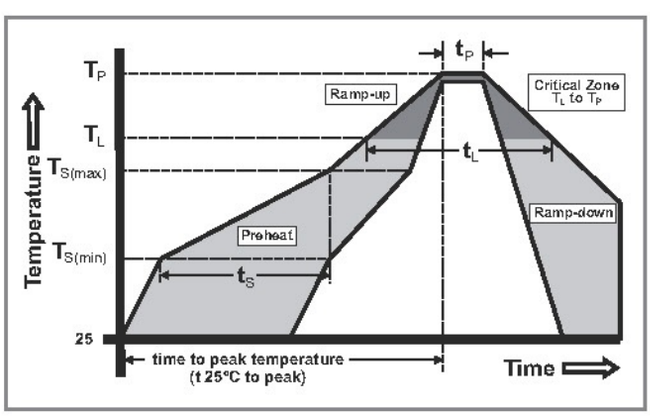
Average Time Current Curves

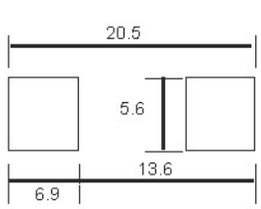


Soldering Parameters

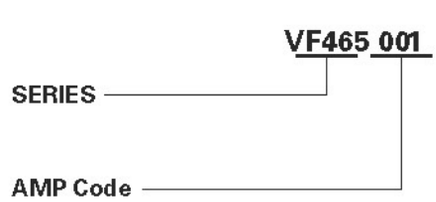
Reflow Condition		Pb – Free assembly
Pre Heat	- Temperature Min ($T_{s(min)}$)	150°C
	- Temperature Max ($T_{s(max)}$)	200°C
	- Time (Min to Max) (t_s)	60 – 120 secs
Average ramp up rate (Liquidus Temp (T_L) to peak		5°C/second max.
$T_{S(max)}$ to T_L - Ramp-up Rate		5°C/second max.
Reflow	- Temperature (T_L) (Liquidus)	217°C
	- Temperature (t_L)	60 – 90 seconds
Peak Temperature (T_P)		$250^{+0/-5}$ °C
Time within 5°C of actual peak Temperature (t_p)		20 – 40 seconds
Ramp-down Rate		5°C/second max.
Time 25°C to peak Temperature (T_P)		8 minutes max.
Do not exceed		260°C

Wave Soldering Parameters	260°C Peak Temperature, 10 seconds max.





Recommended pad layout

Min. copper layer thickness = 100µm
Min. copper trace width =20A, 30 10mm (20A, 30A) / 20mm (40A-100A)

Part Numbering System