

Type CF04 RoHS Pb HF HALOGEN FREE

1.0mmx 0.52mm (0402)

High-surge Enhanced Fuse Series

UL
E345565

Feature

All high-density boards
100% lead-free RoHS and REACH compliant
Low internal resistance
Operating temperature range: -40°C to +125°C

Small portable devices, mobile phone, PDA etc.
Digital products
Game equipment
LCD/LED monitors & modules (Backlight inverter)
Battery package
Auto Electronics

Catalog Number	Marking	Ampere Rating [In]	Voltage Rating (V)	Nominal Resistance Cold Ohms	Nominal Melting I ² t A ² Sec
CF04V3TR315	D	0.315A	32V DC	0.690	0.0020
CF04V3TR50	F	0.50A		0.320	0.0032
CF04V3TR75	V	0.75A		0.140	0.0040
CF04V3TR80	K	0.80A		0.120	0.0053
CF04V3T1R0	L	1.00A		0.090	0.0072
CF04V3T1R25	M	1.25A		0.067	0.0134
CF04V3T1R50	P	1.50A		0.051	0.0136
CF04V3T1R60	N	1.60A		0.046	0.0167
CF04V3T2R0	S	2.00A		0.033	0.0198
CF04V3T2R50	T	2.50A		0.025	0.0376
CF04V3T3R00	3	3.00A		0.020	0.0543
CF04V3T3R15	U	3.15A		0.019	0.0530
CF04V3T4R0	W	4.00A		0.016	0.0900

Approval

UL Recognized 0.315A~4A

Electrical Characteristic

Rated current	1 In	2 In	3 In
	MIN	MAX	MAX
0.315A~4A	4hr	60sec	1 sec

Environmental Temperature at 25°C

Interrupting Rating

0.315A~4A : 35 amperes at 32V DC

Soldering Method

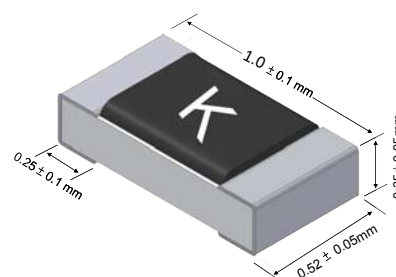
*Reflow Soldering : 260°C, 10Sec. max.
*Wave Soldering : 260°C, 10Sec. max.
*Hand Soldering : 350°C, 3Sec. max.

Material

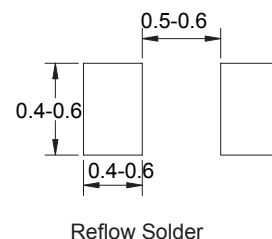
Construction Body Material: Ceramic
Termination Material: Tin(Sn)
Fuse Element: Copper(Cu), Tin(Sn)
Cover coat: Epoxy



Dimension



Recommended Land Pattern

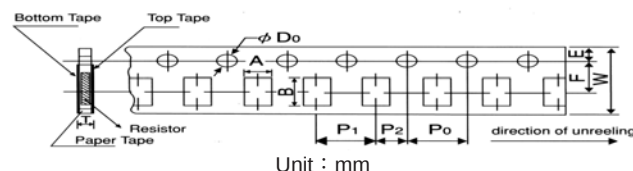


Reflow Solder

Tape and Reel Specification

Unit : mm

Item	A	B	W	F	E	P ₁	P ₂	P ₀	D ₀	T
Criterion	0.7 ±0.05	1.2 ±0.05	8.0 ±0.2	3.5 ±0.05	1.75 ±0.1	2.0 ±0.1	2.0 ±0.05	4.0 ±0.1	Φ1.5 ^{+0.1} ₋₀	0.45 ±0.1

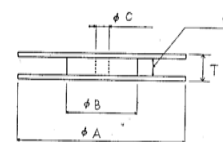
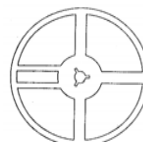


Unit : mm

Item	ΦA	ΦB	ΦC	W	T
Criterion	178 ±2.0	60.0 ±1.0	13.0 ±1.0	9.0 ±1.0	11.4 ±2.0

Tape & Reel Quantity

10000 pcs/reel



Environmental Specification

Thermal Shock

10cycles of -40°C to +125°C ΔR<10%

Vibration

With 10-55-10Hz/min; 1.5mm; XYZ direction/2hrs
No mechanical damages

Insulation Resistance

10,000 ohms or more after opening

Resistance to soldering heat

260±5°C; 10±1 Sec
No mechanical damages

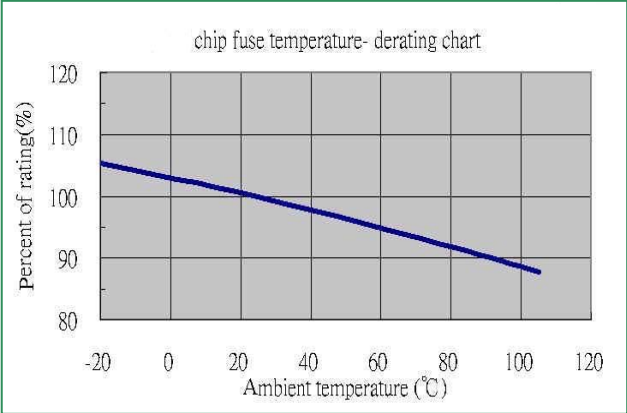
Solder ability

245±5°C; 2±0.5 Sec
95% coverage minimum

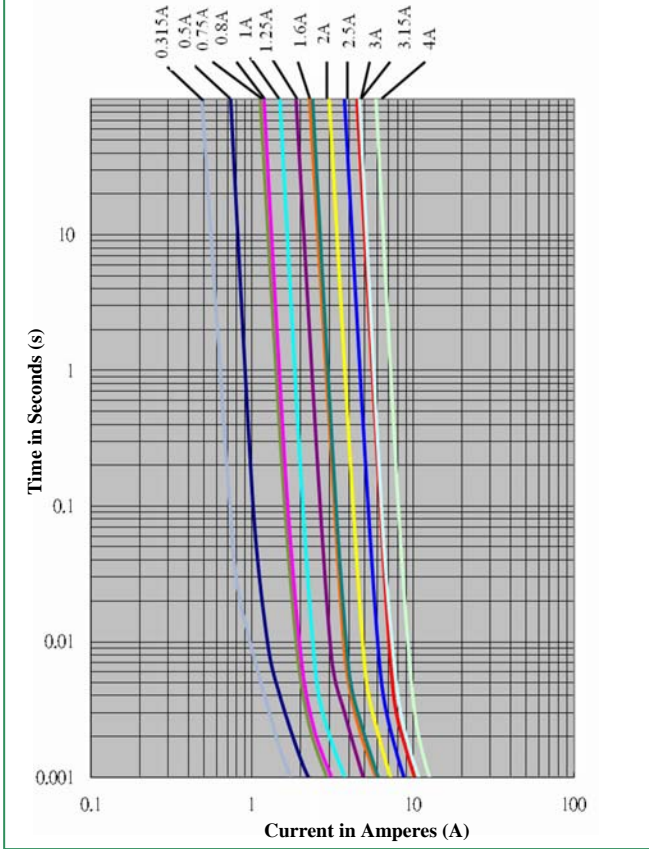
Terminal strength

10N; 10Sec
No mechanical damages

Temperature Rerating Curve

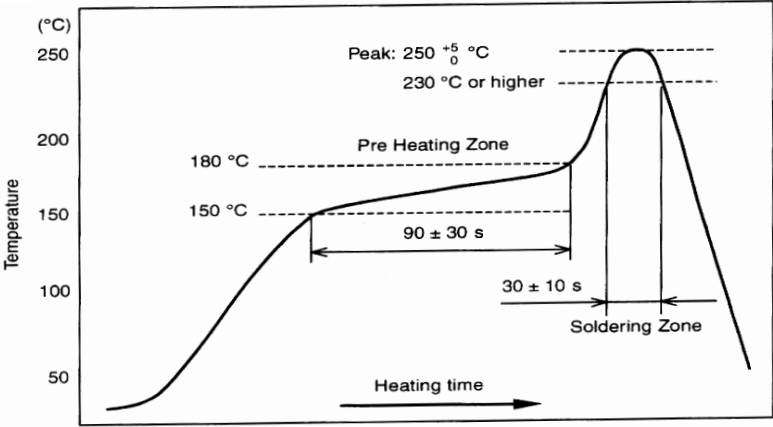


Average Time Current Curves



Soldering Parameters

Reflow profile : (solder : Sn96.5 / Ag3 / Cu0.5)



Peak : 250 ⁺⁵₋₀ °C , 5 sec
Pre – heat Zone : 150 to 180 °C , 90±30 sec
Soldering Zone : 230°C or higher , 30±10 sec

Part Numbering System

<u>CF</u>	<u>04</u>	<u>V3</u>	<u>T</u>	<u>1R0</u>
CF:High-surge Enhanced	04:1.0x0.52mm	VA:125V	T:Paper Tape	R50:0.50A
CFS: Fast acting	06:1.6x0.80mm	V6:63V	1206/0603:5K	1R0:1.00A
CP:Fast acting	12:3.1x1.55mm	V5:50V	0402:10K	1R50:1.50A
CPS: Time-Lag		V3:32V		2R0:2.00A
				2R50:2.50A
				3R0:3.00A
				5R0:5.00A
				15R0:15.0A