

Type CPS06 RoHS



1.6mmx 0.80mm (0603)
Time-Lag Fuse Series



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^2t A ² Sec
CPS06V5TR50	F	0.50A	50V DC	0.264	0.0090
CPS06V3TR63	I	0.63A	32V DC	0.200	0.0140
CPS06V3TR80	K	0.80A		0.143	0.0230
CPS06V3T1R0	L	1.00A		0.083	0.0360
CPS06V3T1R25	M	1.25A		0.054	0.0560
CPS06V3T1R50	P	1.50A		0.042	0.0810
CPS06V3T1R60	N	1.60A		0.040	0.0920
CPS06V3T2R0	S	2.00A		0.028	0.1450
CPS06V3T2R50	T	2.50A		0.022	0.2290
CPS06V3T3R00	3	3.00A		0.018	0.3320
CPS06V3T3R15	U	3.15A		0.016	0.3650
CPS06V3T4R0	W	4.00A		0.013	0.5740
CPS06V3T5R0	Y	5.00A		0.009	0.9270
CPS06V3T6R0	6	6.00A		0.006	1.8600

Approval

UL Recognized 0.5A~6A

Electrical Characteristic

Rated current	1 In	2 In	3 In
	MIN	MAX	MAX
0.5A~6A	4hr	120sec	0.2 sec

Environmental Temperature at 25°C

Interrupting Rating

0.5A : 50 amperes at 50V DC
0.63A~6A : 50 amperes at 32V DC

Soldering Method

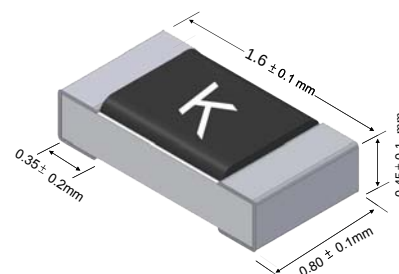
*Reflow Soldering : 260°C, 10Sec. max.
*Wave Soldering : 260°C, 10Sec. max.
*Hand Soldering : 350°C, 3Sec. max.

Material

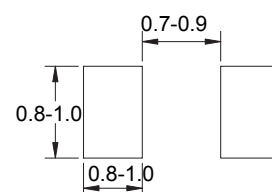
Construction Body Material: Ceramic
Termination Material: Tin(Sn)
Fuse Element: Copper(Cu), Tin(Sn)
Cover coat: Epoxy



Dimension



Recommended Land Pattern

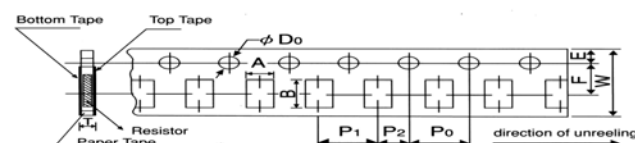


Reflow Solder

Tape and Reel Specification

Unit : mm

Item	A	B	W	F	E	P ₁	P ₂	P ₀	D ₀	T
Criterion	1.1 ±0.1	1.9 ±0.1	8.0 ±0.2	3.5 ±0.05	1.75 ±0.1	4.0 ±0.1	2.0 ±0.05	4.0 ±0.1	+0.1 Φ1.5 -0	0.64 ±0.1

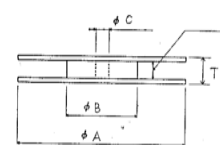
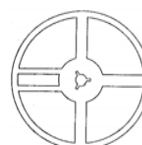


Unit : mm

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

5000 pcs/reel



Environmental Specification

Thermal Shock

10cycles of -40°C to +125°C ΔR<10%

Humidity

85±3°C; 85±5%RH; 1000Hrs
No mechanical damages

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

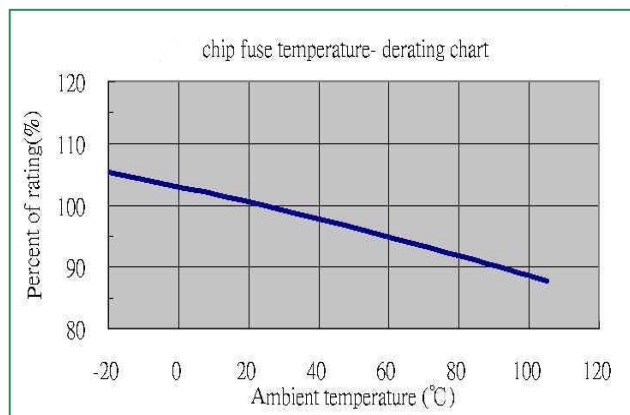
Solder ability

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

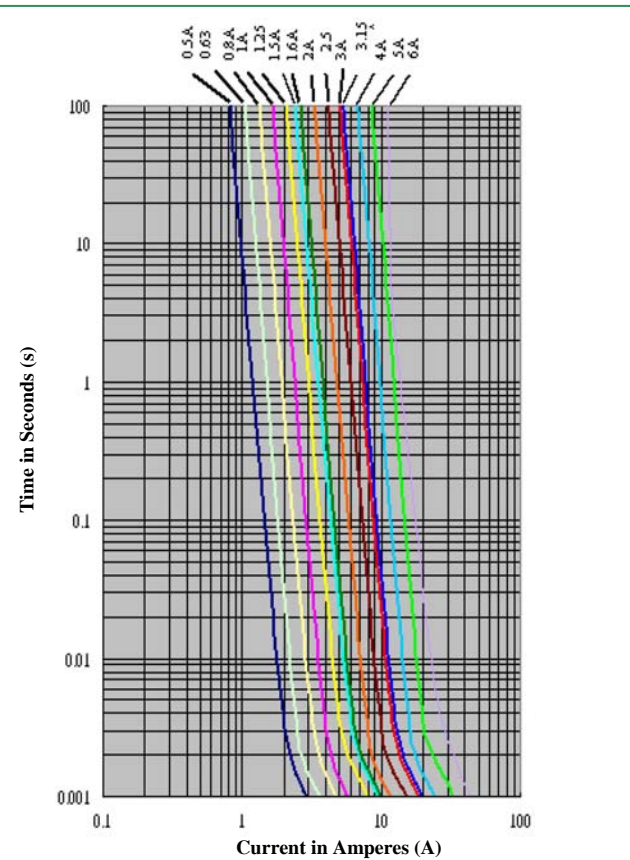
Terminal strength

10N; 10Sec
No mechanical damages

Temperature Derating Curve

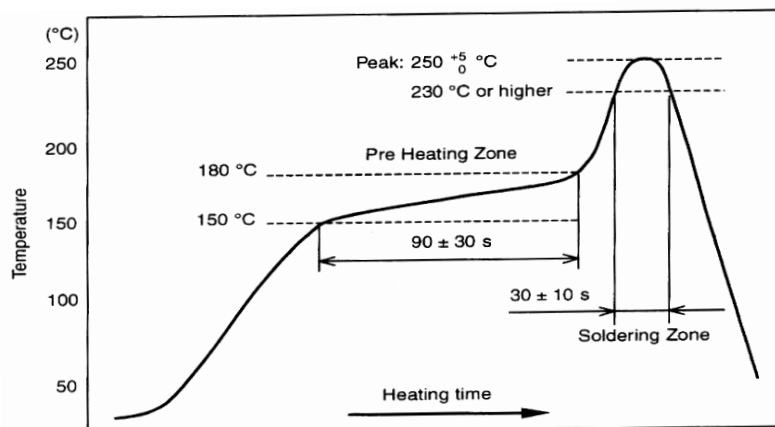


Average Time Current Curves



Soldering Parameters

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



Peak : $250 \pm 5^\circ\text{C}$, 5 sec
- 0

Pre – heat Zone : 150 to 180 °C , 90±30 sec

Soldering Zone : 230°C or higher , 30±10 sec

Part Numbering System

CPS	12	V3	T	1R0
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