

DOC.No. : ISS:THF1206 Series

# **INDIVIDUAL SPECIFICATION SHEET**

**Product Name: 1206 Fast Acting SMD Fuses** 

Part Number: THF1206 Series

Revision: A/2



## Dongguan TLC Electronic Technology Co., LTD

No.18,5th GaoLi Road,TangXia Town,DongGuan,GuangDong,P.R China 523710

TEL: 86-0769-3892 0511

FAX: 86-0769-8793 2077

Http://www.tlcet.com.cn

Rev.	Effective Date	Changed Contents
A/0	2020/8/7	New Release
A/1	2021/5/13	Update
A/2	2022/6/17	Update

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PREPARED BY	APPROVED BY
杨华	STREE







Compatible with reflow and wave solder

Lead Free and Halogen free material

Excellent environmental integrity One time positive disconnect

#### Description

THF1206 series are the fuses set the industry standard for performance, reliability and quality. The ultra small(1206 size) thin-film design provides superior inrush withstand characteristics(I<sup>2</sup>t) and temperature cycling characteristics during use and also makes our SMD fuses more heat and shock tolerant than typical subminiature fuses.

#### **Time-Current Characteristic**

Rated	1.0lm	2 Olm	3.0In	
Current	1.010	2.010		
0.1254-14	4 hours	5 sec	0.2 sec	
0.1254~14	Minimum	Maximum	Maximum	

In: Rating Current

Part No.	Rated Voltage	Rated Current(A)	Breaking Capacity <sup>1</sup>	Typical Cold Resistance <sup>2</sup>	Typical Voltage	Typical Pre- Arcing	Marking
	DC(V)			(mΩ)	Drop (mV)	(A2Sec) <sup>3</sup>	U
F12F0.125TH	125	0.125	- 50A@125V DC	3989	648	0.00054	В
F12F0.2TH	125	0.2		1115	267	0.00060	С
F12F0.25TH	125	0.25		787	225	0.0019	D
F12F0.375TH	125	0.375		400	190	0.0040	E
F12F0.5TH	63	0.5		276	172	0.0057	F
F12F0.75TH	63	0.75	50A@63V DC	118	107	0.0231	G
F12F1TH	63	1		85	88	0.0411	Н

### **Specifications**

Features

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Note

1.DC Interrupting Rating (Measured at rated voltage, time constant of less than 50 microseconds, battery source)

2.DC Cold Resistance are measured at <10% of rated current in ambient temperature of 25°C

3. Typical Pre-arcing I<sup>2</sup>t are measured at 10In Current



Email:customer-service@winvast.net www.tlcet.com.cn www.winvast.cn



# **THF1206 Series**

**Time-Current Curve** 

#### **Temperature-Current Curve**

When choosing the fuse's specification, if the operating environmental temperature beyond the scope from  $20\sim26^{\circ}$ C, you should consider the environmental temperature's affection to fuses.

please refer Temperature-Current curve:





### Part Number



#### **Solder Pad Size**



Model	0.125A~1A
а	2.03 ± 0.15 mm
b	1.15 ± 0.15 mm
с	3.82 ± 0.15 mm



# THF1206 Series

### **Soldering Parameters**

Reflow Methods			
Reflow Condition		Lead (Pb) free solder	
Preheat and soak	Temperature min. $T_s$ (min)	<b>150</b> ℃	
	Temperature max. T <sub>s</sub>	200°C	
	(max)	200 C	
	Time (Ts min to Ts max)	60 190 Seconda	
	(t <sub>s</sub> )	00 - 100 Seconds	
Average ramp up rate $\rm T_s$ (max) to $\rm T_L$		5℃ / Second Max.	
Reflow	Liquidous temperature (T <sub>L</sub> )	<b>217</b> ℃	
	Time at liquidous (t <sub>L</sub> )	60 - 150 Seconds	
Peak package l	k package body temperature (T <sub>P</sub> ) 250 <sup>+0</sup> <sub>-5</sub> °C		
Time within 5℃ of actual peak		20.40 Secondo	
temperature (t <sub>p</sub> )		20-40 3000105	
Average ramp-down rate		5℃ / Second Max.	
Time (25℃ to Peak Temperature)		8 Minutes Max.	
Do not exceed		<b>260</b> ℃	



#### Wave solder:

Reservoir temperature: 260 °C

Time in reservoir: 10 seconds maximum

#### Packing Information & Storage Conditions

Part No.	Quantity	Packaging Option	Packaging Specification
THF1206 Series	3000pcs/Reel	8mm Tape and Reel	EIA-481 Rev. D (IEC 60286, part 3)

#### Storage Conditions:

Under airtight in temperature 10  $^\circ\!\mathrm{C}$  ~40  $^\circ\!\mathrm{C}$  , relative humidity  $~\leq$  75% can store 2 years.

Without dew in temperature10°C~40°C, relative humidity be 95% maximum value for 30 days.

#### Notice

THF1206 Series of SMD fuse is not and shall not be used for any purpose (including but not limited to automotive, military, aerospace, medical, life-saving, life-sustaining or nuclear facility application, surgical implant device or any other application where the product fails or is inoperable), but it is suitable for secondary protection of handheld devices such as cell phones, battery packs, DVDS, hard drives, digital cameras, etc. Warranties granted for products not expressly stated for any purpose shall be deemed null and void. This SMD fuse is not liable for any claims or damages arising from products not specified. Users should test the suitability of the product they choose.