深圳市华微讯半导体有限公司

承　　认　　书

SPECIFICATION FOR APPROVAL

客户名称 Customer name	
客户料号 Customer material No.	
产品名称 Product name	PTC自恢复保险丝
产品型号/规格 specification	
送样日期 Deliver date	

本司确认（HWX APPROVAL）			
检验 Inspection	校对 Proofreading	批准 Approval	签章 Signature
张淑敏	张伟杰		
客户确认（CUSTOMER APPROVAL）			
检验 Inspection	校对 Proofreading	批准 Approval	签章 Signature

确认结果Verify the results：

☐合格Qualified　　☐不合格Unqualified　　☐其他Other

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TEL：0755-2801 1775
网址：www.hwxfuse.com

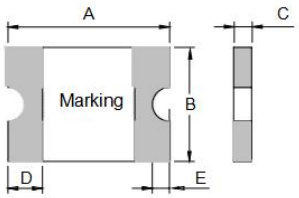
1、 Description

H	S	M	D	1	2	0	6	–	0	2	0	–	2	4	V

Logo	SMD	1206 Series	Hold Current	Vmax

Solderability:

Meets EIA specification RS186-9Eand ANSI/J-STD-002 Category 3



A		B		C		D		E	Marking
MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	
3.00	3.40	1.40	1.80	0.35	0.85	0.25	0.75	0.10	D2

2、 Electrical performance

Part Number	Vmax	Imax	Ihold	Itrip	Pdmax	Max Time Tirp		Resistance	
	(V)	(A)	(A)	(A)	(W)	(A)	(s)	Rmin (Ω)	R1max (Ω)
HSMD1206-020	24	100	0.2	0.40	0.6	8.0	0.1	0.5	2.6

Ih: Maximum operating current of the HPTC at an ambient temperature of 25℃

It: The HPTC initiated the minimum current for protection at an ambient temperature of 25℃

Vmax: Maximum operating voltage of the HPTC

Imax: Maximum current that the HPTC can withstand

Rmin: Minimum resistance at 25℃ of stationary air

R1max: Maximum resistance of product

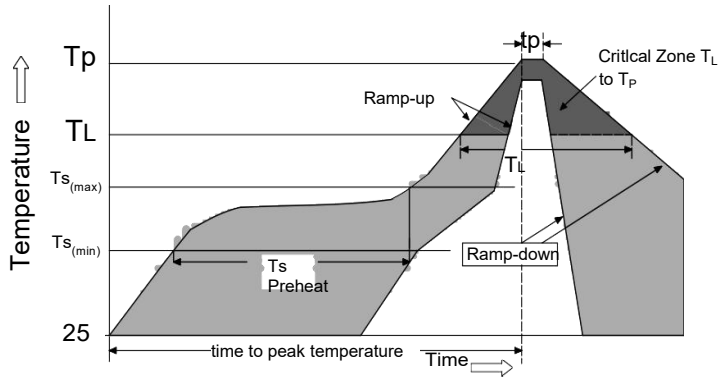
3、Table of Operating Current with Temperature (A) (for reference only)

Model	Ambient Operating Temperature								
	-40℃	-20℃	0℃	25℃	40℃	50℃	60℃	70℃	85℃
HSMD1206-020	0.28	0.25	0.23	0.20	0.17	0.15	0.14	0.12	0.09

4、 Test Procedures And Requirements

test	Test Condition	Accept/Reject Criteria
Resistance	In still air @ 25℃	Rmin≤R≤Rmax
Time to Trip	Specified current, Vmax, 25℃	T≤maximum Time to Trip
Trip Cycle Life	Vmax, Imax, 100cycles	No arcing or burning
Trip Endurance	Vmax, 1 hours	No arcing or burning
Terminal materials :	Tin-Plated Nickle-copper	
Soldering zone	Meets EIA specification RS 186-9E and ANSI/J-STD-002 Category 3.	
Environmental Specifications		
Passive aging	85℃,1000hours	±10%
Humidity aging	85℃/85%RH.1000 hours	±5%
Thermal shock	MIL-STD-202,Method 107G +85℃/-40℃,20times	-30% typical resistance change
Solvent Resistance	MIL-STD-202,Method 215	No change
Vibration	ML-STD-883C,Test Condition A	No chage

5、 Soldering parameters



Profile Feature		
Average Ramp-Up Rate ($Ts_{(max)}$ to T_P)		3°C/second max
Pre Heat:	Temperature Min ($Ts_{(min)}$)	150°C
	Temperature Max ($Ts_{(max)}$)	200°C
	Time (Min to Max) (t_s)	60 – 180 secs
Time Maintained Above:	Temperature (T_L)	217°C
	Temperature (t_L)	60 – 150 seconds
Peak / Classification Temperature (T_P)		$260^{+0/-5}$ °C
Time within 5°C of actual peak Temperature (t_p)		20 – 40 seconds
Ramp-down Rate		6°C/second max
Time 25°C to peak Temperature (T_P)		8 minutes Max.

◆All temperature refer to topside of thepackage, measured on the package body surface

◆If reflow temperature exceeds the recommended profile,devices may not meet the performance requirements

◆Recommended reflow methods: IR,vapor phase oven,hot air oven,N2 environment for lead

◆Recommended maximum paste thickness is 0.25mm (0.010inch)

◆Devices can be cleaned using standard industry methods and solvents

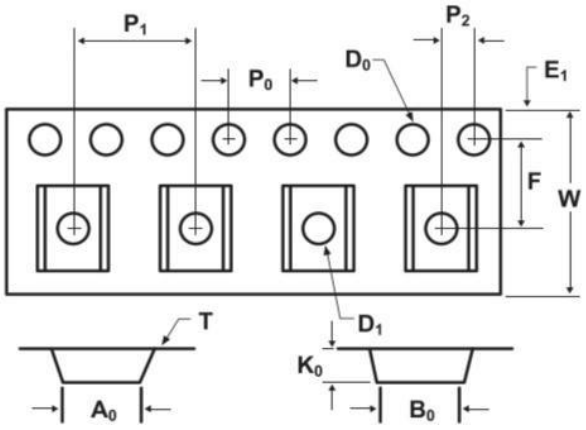
6、 Package Information

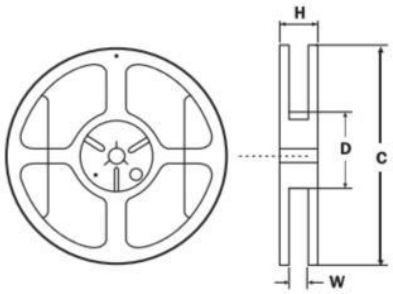
storage condition：

Storage conditions: 30° C max, 60% R.H.Devices may not meet specified performance if storage conditions are exceeded。

W	8.10±0.10
F	3.50±0.05
E1	1.75±0.10
D0	1.55±0.05
D1	1.00 min
P0	4.0±0.10
P1	4.0±0.10
P2	2.0±0.05
A0	1.90±0.10
B0	3.5±0.10
T	0.25±0.05
K0	0.85±0.10
Leader	390mm
Trailer	160mm
Q'ty	4,000pcs/Reel

REEL DIMENSIONS: EIA-481-1 (mm)	
C	Ø178±1.0
D	Ø60.2±0.5
W	9.0±1.5
H	11.0±0.5





7、 WARNING

1、Use PPTC exceed by the maximum rating and improper use may result in device damage and possible electrical arcing and flame.

2、PPTC are designed for protection against over current or temperature fault conditions and should not be used when repeated fault conditions or prolonged trip events are anticipated.

3、Device performance can be impacted negatively if devices are handled in a manner inconsistent with recommended electronic, thermal, and mechanical procedures for electronic components.

4、Use PPTC with a large inductance in circuit will generate a circuit voltage above the rated voltage of the PPTC.

5、Avoid impact PPTC device its thermal expansion like placed under pressure or installed in limited space.

6、If any quality problems caused by improper use mentioned above,our company is not responsible.