Radial Leaded PTC Resettable Fuse : FHT Series

1. Summary

(a) RoHS Compliant (Lead Free) Product
(b) Applications : Wide variety of electronic equipment
(c) Product Features : Very Low resistance, Very High hold current, Solid state, Radial leaded product ideal for up to 16V and Operating temperatures up to 125℃.
(d) Operation Current : 0.5A~15.0A
(e) Maximum Voltage : 16V/30VDC
(f) Temperature Range : -40℃ to 125℃

2. Agency Recognition

UL: File No. E211981
C-UL: File No. E211981
TÜV: File No. R50004084

3. Electrical Characteristics (23℃)

Part Number	Hold Current	Trip Current	Max.Time to Trip	Maximum Current	Rated Voltage	Typical Power	Resistance	
							RMIN	R1MAX
	IH, A	IT, A	at 5xIH, S	IMAX, A	VMAX, VDC	Pd, W	Ohms	Ohms
FHT050-30F	0.5	0.9	2.5	40	30	0.9	0.4800	1.1000
FHT070-30F	0.7	1.4	3.2	40	30	1.4	0.3000	0.8000
FHT100-30F	1.0	1.8	5.2	40	30	1.4	0.1800	0.4300
FHT200-16F	2.0	3.8	3.0	100	16	1.4	0.0450	0.1100
FHT300-16F	3.0	6.0	5.0	100	16	3.0	0.0330	0.0790
FHT400-16F	4.0	7.0	5.0	100	16	3.3	0.0240	0.0600
FHT450-16F	4.5	7.8	3.0	100	16	3.6	0.0220	0.0540
FHT550-16F	5.5	10.0	6.0	100	16	3.5	0.0150	0.0370
FHT600-16F	6.0	10.8	5.0	100	16	4.1	0.0130	0.0320
FHT650-16F	6.5	12.0	5.5	100	16	4.3	0.0110	0.0260
FHT700-16F	7.0	13.0	7.0	100	16	4.0	0.0100	0.0250
FHT750-16F	7.5	13.1	7.0	100	16	4.5	0.0094	0.0220
FHT800-16F	8.0	15.0	8.0	100	16	4.2	0.0080	0.0200
FHT900-16F	9.0	16.5	10.0	100	16	5.0	0.0074	0.0170
FHT1000-16F	10.0	18.5	9.0	100	16	5.3	0.0062	0.0150
FHT1100-16F	11.0	20.0	11.0	100	16	5.5	0.0055	0.0130
FHT1300-16F	13.0	24.0	13.0	100	16	6.9	0.0041	0.0100
FHT1400-16F	14.0	27.0	13.0	100	16	6.9	0.0030	0.0090
FHT1500-16F	15.0	28.0	20.0	100	16	7.0	0.0032	0.0092

NOTE : Specification subject to change without notice.

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I_H=Hold current-maximum current at which the device will not trip at 23℃ still air.
I_T=Trip current-minimum current at which the device will always trip at 23℃ still air.
V_{MAX}=Maximum voltage device can withstand without damage at its rated current.
I_{MAX}= Maximum fault current device can withstand without damage at rated voltage (V_{MAX}).
Pd=Typical power dissipated from device when in tripped state in 23℃ still air environment.
R_{MIN}=Minimum device resistance at 23℃.
$R1_{MAX}$=Maximum device resistance at 23℃, 1 hour after tripping .
Physical specifications:
Lead material: FHT050-30F~FHT100-30F and FHT200-16F Tin plated copper clad steel, 24 AWG.
FHT300-16F~FHT1100-16F Tin plated copper, 20 AWG.
FHT1300-16F~FHT1500-16F Tin plated copper, 18 AWG.
Soldering characteristics:MIL-STD-202, Method 208E.
Insulating coating:Flame retardant epoxy, meets UL-94V-0 requirement.

4. Production Dimensions (millimeter)

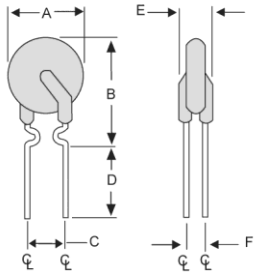

Fig.1
Lead Size :24AWG
Φ0.51 mm Diameter

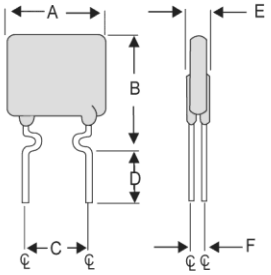

Fig.2
Lead Size :24AWG
Φ0.51 mm Diameter

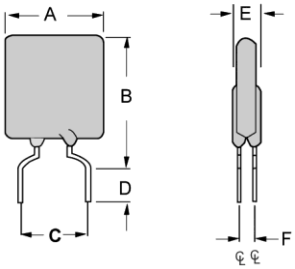

Fig.3
Lead Size : 20AWG
Φ 0.81 mm Diameter

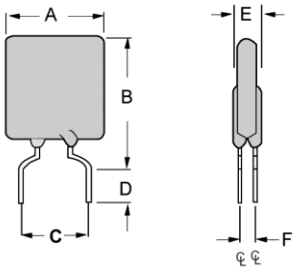

Fig.4
Lead Size : 18AWG
Φ 1.00 mm Diameter

Part Number	Figure	A	B	C	D	E	F
		Maximum	Maximum	Typical	Minimum	Maximum	Typical
FHT050-30F	1	7.4	12.7	5.1	7.6	3.0	1.2
FHT070-30F	2	6.9	10.8	5.1	7.6	3.0	1.2
FHT100-30F	1	9.7	13.6	5.1	7.6	3.0	1.2
FHT200-16F	1	9.4	14.4	5.1	7.6	3.0	1.2
FHT300-16F	3	8.8	13.8	5.1	7.6	3.0	1.2
FHT400-16F	3	10.0	15.0	5.1	7.6	3.0	1.2
FHT450-16F	3	10.4	15.6	5.1	7.6	3.0	1.2
FHT550-16F	3	11.2	18.9	5.1	7.6	3.0	1.2
FHT600-16F	3	11.2	21.0	5.1	7.6	3.0	1.2
FHT650-16F	3	12.7	22.2	5.1	7.6	3.0	1.2
FHT700-16F	3	14.0	21.9	5.1	7.6	3.0	1.2
FHT750-16F	3	14.0	23.5	5.1	7.6	3.0	1.2
FHT800-16F	3	16.5	22.5	5.1	7.6	3.0	1.2
FHT900-16F	3	16.5	25.7	5.1	7.6	3.0	1.2
FHT1000-16F	3	17.5	26.5	10.2	7.6	3.0	1.2
FHT1100-16F	3	21.0	26.1	10.2	7.6	3.0	1.2
FHT1300-16F	4	23.5	28.7	10.2	7.6	3.6	1.4
FHT1400-16F	4	23.5	28.7	10.2	7.6	3.6	1.4
FHT1500-16F	4	23.5	28.7	10.2	7.6	3.6	1.4

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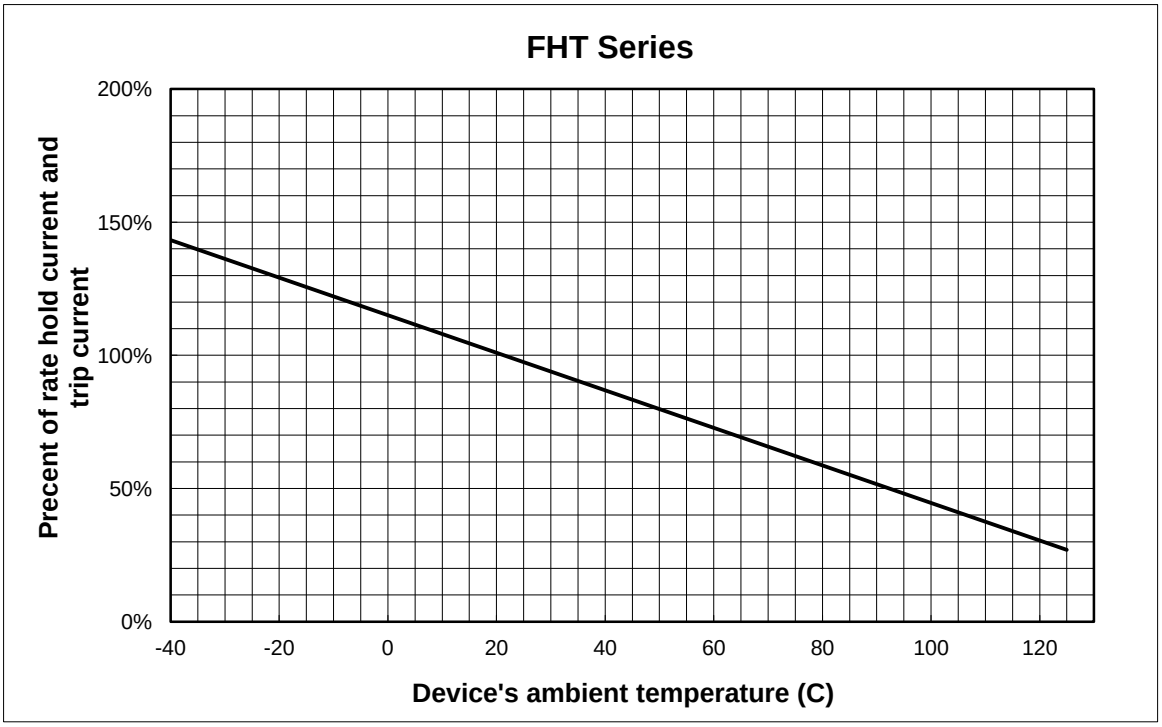
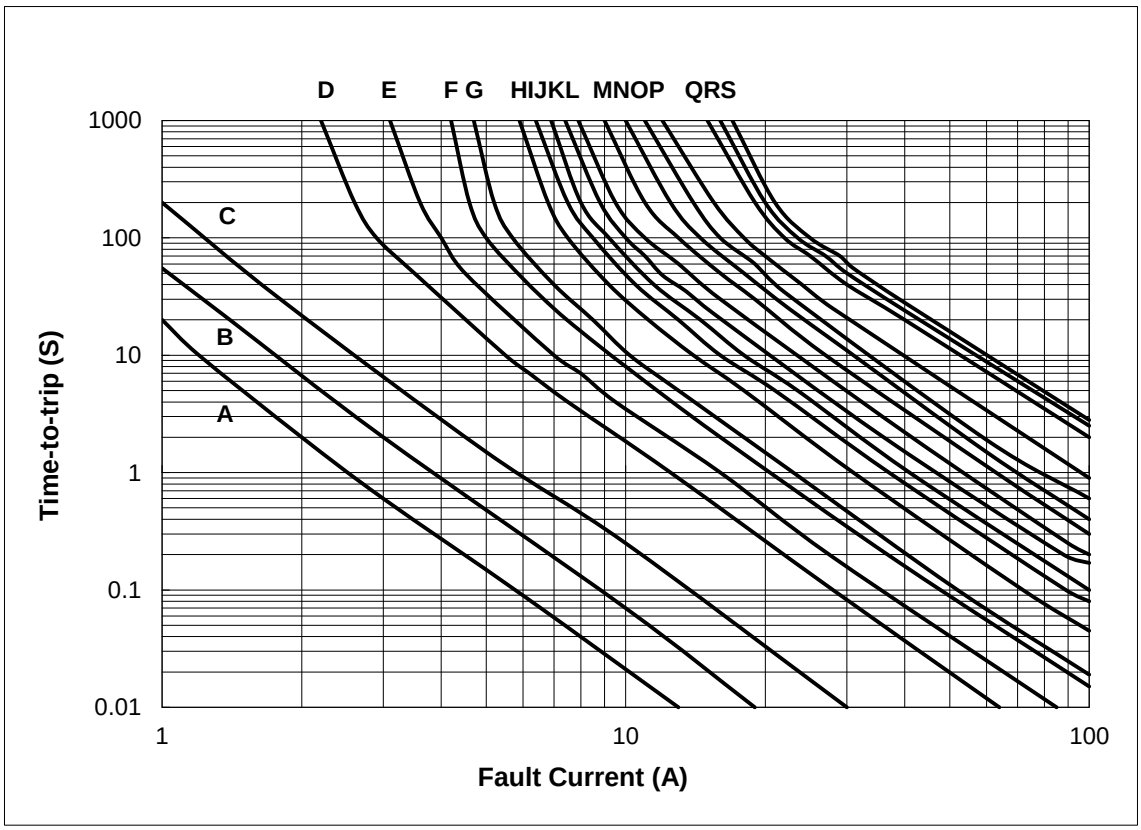
5. Thermal Derating Curve



6. Typical Time-To-Trip at 23℃

A=FHT050-30F
B=FHT070-30F
C=FHT100-30F
D=FHT200-16F
E=FHT300-16F
F=FHT400-16F
G=FHT450-16F
H=FHT550-16F
I=FHT600-16F
J=FHT650-16F
K=FHT700-16F
L= FHT750-16F
M=FHT800-16F
N=FHT900-16F
O=FHT1000-16F
P=FHT1100-16F
Q=FHT1300-16F
R=FHT1400-16F
S=FHT1500-16F



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7.Material Specification

Lead material： FHT050-30F~FHT100-30F and FHT200-16F Tin plated copper clad steel, 24 AWG.

FHT300-16F~FHT1100-16F Tin plated copper, 20 AWG.

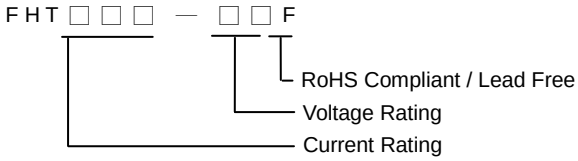
FHT1300-16F~FHT1500-16F Tin plated copper, 18 AWG.

Soldering characteristics:MIL-STD-202, Method 208E.

Insulating coating:Flame retardant epoxy, meets UL-94V-0 requirement.

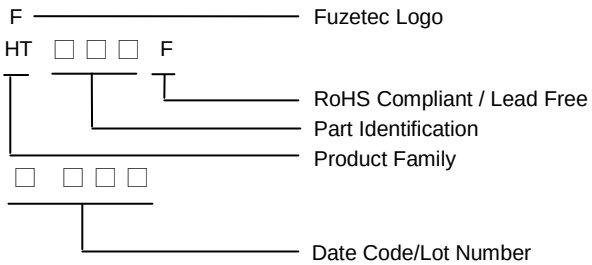
8. Part Numbering and Marking System

Part Numbering System



Part Marking System

Example



Note: Font on Marking may look slightly different due to fine turnings of each Marking printer.

Warning:

- Each product should be carefully evaluated and tested for their suitability of application.
- Operation beyond the specified maximum rating or improper use may result in damage and possible electrical arcing and/or flame.
- PPTC device are intended for occasional overcurrent protection. Application for repeated overcurrent condition and/or prolonged trip are not anticipated.
- Avoid contact of PPTC device with chemical solvent, including some inert material such as silicone based oil, lubricant and etc. Prolonged contact will damage the device performance.
- Additional protection mechanism are strongly recommended to be used in conjunction with the PPTC device for protection against abnormal or failure conditions.
- Avoid use of PPTC device in a constrained space such as potting material, housing and containers where have limited space to accommodate device thermal expansion and/or contraction.

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单击下面可查看定价，库存，交付和生命周期等信息

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