RADIAL LEADED PPTC RESETTABLE FUSE
FRHV Series : 60V/100V/250Vdc

RoHS

FEATURES

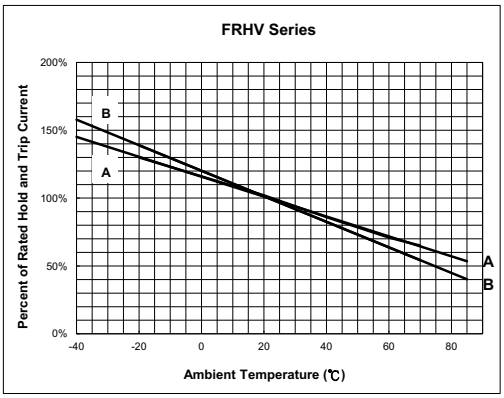
- Applications : IEEE 1394 Fire WIre, Computers & Consumer electronics
- Product Features : Fast trip time, Lower Trip-to-hold Ratio
- Operation Current : 0.5A ~ 2.50A
- Maximum Voltage : 36Vdc
- Temperature Range : -40°C to 85°C

AGENCY RECOGNITION

Made for RFE by UL shop Fuzetec

- UL (E211981)
- C-UL (E211981)
- TÜV (R50138901)

THERMAL DERATING CURVE



A= FRH180-250XF
B= All other FRHV devices

ELECTRICAL CHARACTERISTICS (23°C)

Part Number	Hold Current	Trip Current	Max. Time to Trip		Maximum Current	Max. Oper. Voltage	Max. Int. Voltage	Typical Power	Resistance	
			Current	Time					R min	R1 max
	I_H, A	I_T, A	A	Sec.	I_{MAX}, A	V_{MAX}, Vdc	V_{I-MAX}, Vac	Pd, W	Ohms	Ohms
FRH080-250VF	0.08	0.16	0.35	4.0	3.0	100	250	1.0	14.00	33.00
FRH110-250VF	0.11	0.22	1.00	2.0	3.0	100	250	1.0	5.00	16.00
FRH120-250VF	0.12	0.24	1.00	2.0	3.0	100	250	1.0	4.00	16.00
FRH145-250VF	0.15	0.29	1.00	2.5	3.0	100	250	1.0	3.00	12.00
FRH180-250XF	0.18	0.65	3.00	2.0	10.0	100	250	1.0	0.80	4.00
FRH150-600MF	0.15	0.30	1.00	4.0	3.0	250	600	1.0	6.00	17.00
FRH160-600MF	0.16	0.32	1.00	7.0	3.0	250	600	1.0	4.00	16.00
FRH160-600VF	0.16	0.32	1.00	7.0	3.0	250	600	1.0	4.00	18.00
FRH200-600VF	0.20	0.40	1.00	12.0	3.0	250	600	1.0	4.00	13.50
FRH250-600VF	0.25	0.85	3.00	1.0	3.0	250	600	1.0	1.00	7.00
FRH400-600F	0.40	1.00	3.00	4.0	3.0	60	600	1.0	0.95	1.90

I_H=Hold current-maximum current at which the device will not trip at 23°C still air.
I_T=Trip current-maximum current at which the device will always trip at 23°C 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 the tripped state in 23°C still air environment.
R_{MIN}=Minimum device resistance at 23°C.
$R1_{MAX}$=Maximum device resistance at 23°C, 1 hour after tripping.

Physical specifications:
Lead material: Tin plated copper, 24 AWG.
Soldering characteristics: MIL-STD-202, Method 208E.
Insulating coating: Flame retardant epoxy, meet UL-94V-0 requirement.

*** Note: All FRHV products are designed to assist equipment to pass ITU, UL1950 or GR1089 specification.**
*** FRH150-600MF, FRH160-600VF meet UL497A Overvoltage and Endurance Conditioning requirements for Thermistor type components.**

CAUTION : FRHV devices are not intended for continuous use of Line Voltage such as 120Vac ~ 600Vac and

NOTE: All Specifications subject to change without notice.

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DIMENSIONS (mm)

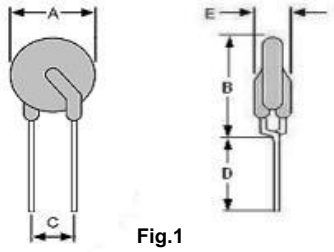


Fig.1
Lead Size :22AWG,
Φ 0.65 mm Diameter

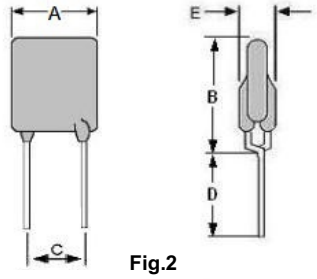
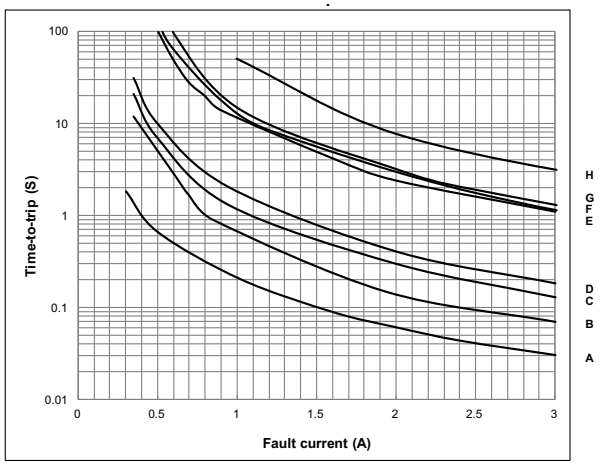
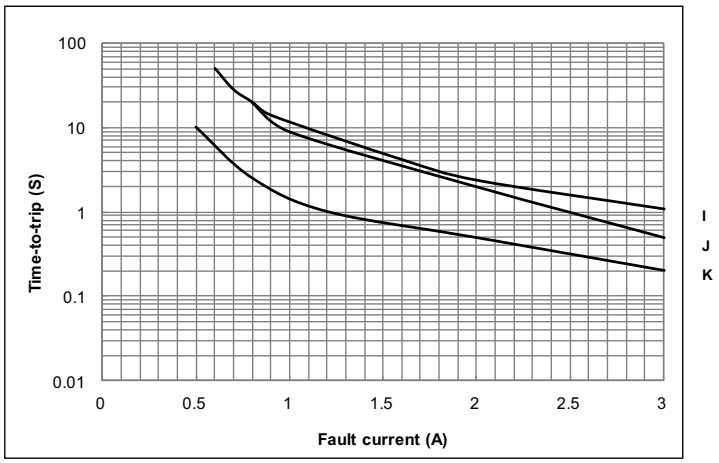


Fig.2
Lead Size : 22AWG,
Φ 0.65 mm Diameter

Part Number	Fig.	A	B	C	D	E
		Maximum	Maximum	Typical	Minimum	Maximum
FRH080-250VF	1	5.8	9.6	5.0	4.7	4.6
FRH110-250VF	1	6.8	9.9	5.0	4.7	4.6
FRH120-250VF	2	6.5	11.0	5.0	4.7	4.6
FRH145-250VF	2	6.5	11.0	5.0	4.7	4.6
FRH180-250XF	1	9.0	12.0	5.0	4.7	3.8
FRH150-600MF	2	9.0	12.5	5.0	4.7	4.6
FRH160-600MF	2	9.0	12.5	5.0	4.7	4.6
FRH160-600VF	2	16.0	12.6	5.0	4.7	6.0
FRH200-600VF	2	12.0	14.0	5.0	4.7	6.0
FRH250-600VF	2	12.0	15.0	5.0	4.7	6.0
FRH400-600F	2	15.0	14.5	5.0	4.7	6.0

TYPICAL TIME-TO-TRIP AT 23°C





A= FRH080-250VF
B= FRH110-250VF
C= FRH120-250VF
D= FRH145-250VF
E= FRH160-600VF
F= FRH200-600VF
G= FRH250-600VF
H= FRH400-600F

I= FRH160-600MF
J= FRH180-250XF
K= FRH150-600MF

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