

### FEATURES

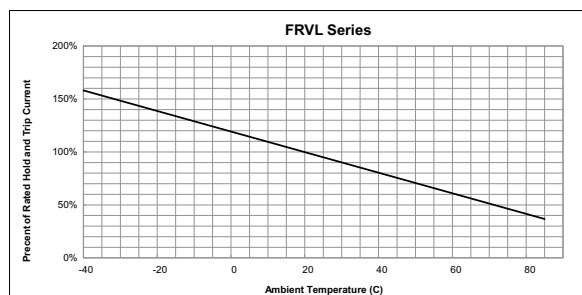
- Applications : Wide variety of electronic equipment
- Product Features : Ideal for up to 120V ac/dc
- Operation Current : 0.10A ~ 3.75A
- Maximum Operating Voltage : 120V ac/dc
- Maximum Interrupt Voltage : 135V ac/dc
- Temperature Range : -40°C to 85°C

### AGENCY RECOGNITION

Made for RFE by UL shop Fuzetec

- UL (E211981)
- C-UL (E211981)
- TÜV (R50122733)

### THERMAL DERATING CURVE



### 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	
	I <sub>H</sub> , A	I <sub>T</sub> , A	at 5 x I <sub>H</sub> , S	I <sub>MAX</sub> , A	V <sub>MAX</sub> , Vac/dc	V <sub>I-MAX</sub> , Vac/dc		R min	R1 max
	I <sub>H</sub> , A	I <sub>T</sub> , A		I <sub>MAX</sub> , A	V <sub>MAX</sub> , Vac/dc	V <sub>I-MAX</sub> , Vac/dc	P <sub>d</sub> , W	Ohms	Ohms
FRVL010-120F	0.10	0.20	10.0	2	120	135	0.8	3.00	7.50
FRVL017-120F	0.17	0.34	10.0	2	120	135	0.8	2.00	7.00
FRVL020-120F	0.20	0.40	9.0	2	120	135	1.1	1.83	4.40
FRVL025-120F	0.25	0.50	7.5	3	120	135	1.1	1.25	3.00
FRVL030-120F	0.30	0.60	8.5	3	120	135	1.4	0.88	2.10
FRVL040-120F	0.40	0.80	6.5	3	120	135	1.4	0.55	1.29
FRVL050-120F	0.50	1.00	6.0	3	120	135	1.6	0.50	1.17
FRVL065-120F	0.65	1.30	5.7	5	120	135	1.7	0.31	0.72
FRVL070-120F	0.75	1.50	6.3	5	120	135	1.8	0.25	0.60
FRVL075-120F	0.75	1.50	15.0	8	120	135	2.6	0.25	0.69
FRVL090-120F	0.90	1.80	7.2	5	120	135	1.8	0.20	0.47
FRVL100-120F	1.00	2.00	15.0	10	120	135	2.6	0.18	0.47
FRVL110-120F	1.10	2.20	8.2	8	120	135	2.3	0.15	0.38
FRVL125-120F	1.25	2.50	20.0	13	120	135	2.9	0.11	0.33
FRVL130-120F	1.35	2.70	9.6	10	120	135	2.6	0.12	0.30
FRVL135-120F	1.35	2.70	20.0	14	120	135	3.1	0.11	0.30
FRVL160-120F	1.60	3.20	11.4	12	120	135	3.1	0.09	0.22
FRVL185-120F	1.85	3.70	12.6	12	120	135	3.4	0.08	0.19
FRVL200-120F	2.00	4.20	36.0	20	120	135	4.3	0.08	0.21
FRVL250-120F	2.50	5.00	15.6	15	120	135	4.4	0.05	0.13
FRVL300-120F	3.00	6.00	19.8	17	120	135	4.6	0.04	0.10
FRVL375-120F	3.75	7.50	24.0	20	120	135	4.8	0.03	0.08

I<sub>H</sub>=Hold current-maximum current at which the device will not trip at 23°C still air.  
 I<sub>T</sub>=Trip current-maximum current at which the device will always trip at 23°C still air.  
 V<sub>MAX</sub>=Maximum voltage device can withstand without damage at its rated current.  
 I<sub>MAX</sub>=Maximum fault current device can withstand without damage at rated voltage (V<sub>MAX</sub>).  
 P<sub>d</sub>=Typical power dissipated from device when in the tripped state in 23°C still air environment.  
 R<sub>MIN</sub>=Minimum device resistance at 23°C.  
 R1<sub>MAX</sub>=Maximum device resistance at 23°C, 1 hour after tripping.

Physical specifications:

Lead material: FRVL010 ~ FRVL017 Tin plated copper, 24 AWG.  
 FRVL020 ~ FRVL070 and FRVL090 Tin plated copper, 22AWG  
 FRVL075 and FRVL100~FRVL375 Tin plated copper, 20AWG  
 Soldering characteristics: MIL-STD-202, Method 208E.  
 Insulating coating: Flame retardant epoxy, meet UL-94V-0 requirement.

**NOTE: All Specifications subject to change without notice.**

**DIMENSIONS (mm)**

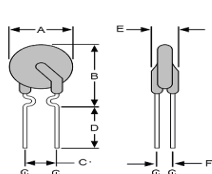


Fig.1  
Lead Size :24AWG  
Φ 0.51 mm Diameter

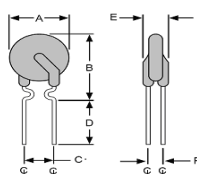


Fig.2  
Lead Size :22AWG  
Φ 0.65 mm Diameter

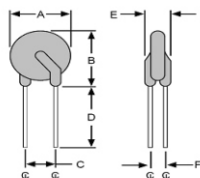


Fig.3  
Lead Size :20AWG  
Φ 0.81 mm Diameter

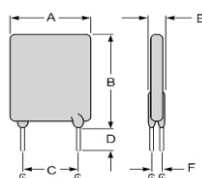
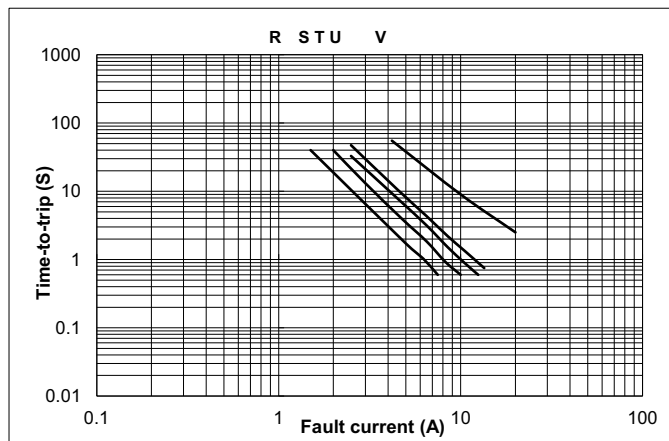
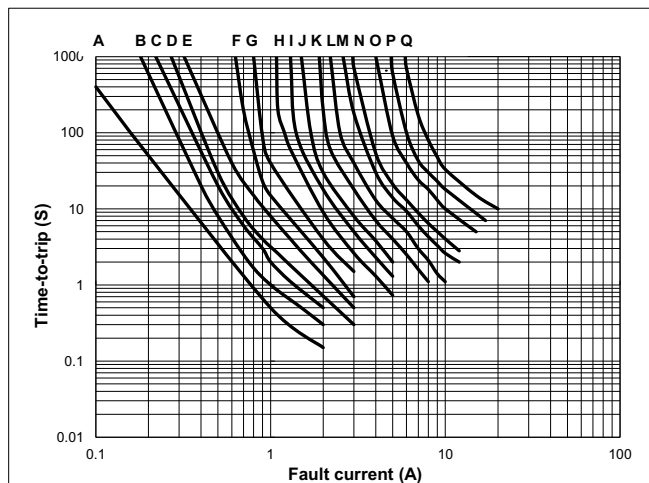


Fig.4  
Lead Size : 20AWG  
Φ 0.81 mm Diameter

Part Number	Fig.	A	B	C	D	E	F
		Maximum	Maximum	Typical	Minimum	Maximum	Typical
FRVL010-120F	1	7.9	13.0	5.1	7.6	3.8	2.2
FRVL017-120F	1	7.9	13.0	5.1	7.6	3.8	2.2
FRVL020-120F	2	7.9	13.0	5.1	7.6	3.8	2.2
FRVL025-120F	2	7.9	13.0	5.1	7.6	3.8	2.2
FRVL030-120F	2	7.9	13.0	5.1	7.6	3.8	2.2
FRVL040-120F	2	8.2	14.2	5.1	7.6	3.8	2.2
FRVL050-120F	2	9.2	14.9	5.1	7.6	3.8	2.2
FRVL065-120F	2	9.7	14.9	5.1	7.6	3.8	2.2
FRVL070-120F	2	10.6	15.5	5.1	7.6	3.8	2.2
FRVL075-120F	4	10.9	17.0	5.1	7.6	4.1	2.2
FRVL090-120F	2	11.9	15.9	5.1	7.6	3.8	2.2
FRVL100-120F	4	11.5	20.1	5.1	7.6	4.1	2.2
FRVL110-120F	3	13.3	18.3	5.1	7.6	4.1	2.2
FRVL125-120F	4	14.0	21.7	5.1	7.6	4.1	2.2
FRVL130-120F	3	15.5	20.6	5.1	7.6	4.1	2.2
FRVL135-120F	4	16.3	21.7	5.1	7.6	4.1	2.2
FRVL160-120F	3	17.5	22.5	5.1	7.6	4.1	2.2
FRVL185-120F	3	19.9	24.9	5.1	7.6	4.1	2.2
FRVL200-120F	4	23.5	27.9	10.2	7.6	4.1	2.2
FRVL250-120F	3	22.5	27.5	10.2	7.6	4.1	2.2
FRVL300-120F	3	25.5	30.0	10.2	7.6	4.1	2.2
FRVL375-120F	3	29.5	34.0	10.2	7.6	4.1	2.2

**TYPICAL TIME-TO-TRIP AT 23°C**



- A=FRVL010-120F
- B=FRVL017-120F
- C=FRVL020-120F
- D=FRVL025-120F
- E=FRVL030-120F
- F=FRVL040-120F
- G=FRVL050-120F
- H=FRVL065-120F
- I=FRVL070-120F
- J=FRVL090-120F
- K=FRVL110-120F
- L=FRVL130-120F
- M=FRVL160-120F
- N=FRVL185-120F
- O=FRVL250-120F
- P=FRVL300-120F
- Q=FRVL375-120F

- R=FRVL075-120F
- S=FRVL100-120F
- T=FRVL125-120F
- U=FRVL135-120F
- V=FRVL200-120F

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