



### Application

- Line Voltage Power Supply
- Transformer and Appliances

**RoHS  
Compliant**

### Features

- Low hold current
- Solid state
- Radial leaded product ideal for up to 330V AC/DC
- TUV Approved

### Specifications

Operation Current	: 0.05A to 2A
Maximum Operating Voltage	: 277V AC
Maximum Interrupt Voltage	: 305V AC
Temperature Range	: -20°C to +85°C

### Electrical Characteristics (23°C)

Part Number	Hold Current	Trip Current	Max.Time to Trip	Max. Current	Rated Voltage	Max. Int. Voltage	Typ. Power	Resistance	
								R <sub>MIN</sub>	R <sub>1MAX</sub>
	I <sub>H</sub> , A	I <sub>T</sub> , A	at 5X I <sub>H</sub> , S	I <sub>MAX</sub> , A	V <sub>MAX</sub> , VAC	V <sub>I-MAX</sub> , VAC	P <sub>d</sub> , W	Ω	Ω
MCFRV005-277F	0.05	0.2	18	1	277	305	0.7	8	26
MCFRV008-277F	0.08	0.26	18	1.2			0.8	4.5	18
MCFRV012-277F	0.12	0.3	18	1.2			1	3	12
MCFRV016-277F	0.16	0.37	18	1.6			1.4	2.3	8
MCFRV025-277F	0.25	0.56	18.5	2.5			1.5	1.3	4.3
MCFRV033-277F	0.33	0.74	21	3.3			1.7	0.94	3.1
MCFRV040-277F	0.4	0.9	24	4			2	0.81	2.7
MCFRV055-277F	0.55	1.25	26	5.5			2.4	0.63	2.1
MCFRV075-277F	0.75	1.5	18	7.5			2.6	0.43	1.4
MCFRV100-277F	1	2	21	10			2.9	0.32	1.1
MCFRV125-277F	1.25	2.5	23	12.5			3.3	0.24	0.8
MCFRV150-277F	1.5	3	23	15			3.7	0.14	0.48
MCFRV200-277F	2	4	28	20			4.5	0.09	0.29

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-minimum 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 tripped state in 23°C still air environment.

R<sub>Min</sub>=Minimum device resistance at 23°C.

R<sub>1Max</sub>=Maximum device resistance at 23°C, 1 hour after tripping.

Physical specifications:

Lead material: MCFRV005-277F~MCFRV016-277F Tin plated copper, 24AWG.

MCFRV025-277F~MCFRV040-277F Tin plated copper, 22AWG.

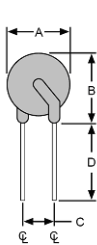
MCFRV055-277F~MCFRV200-277F Tin plated copper, 20AWG.

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

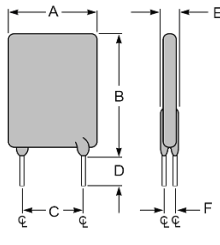
Insulating coating: Flame retardant epoxy, meets UL-94V-0 requirement.

# Radial Leaded PTC Resettable Fuses **multicomp**PRO

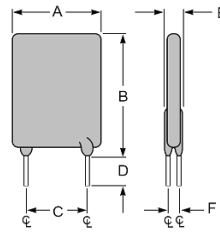
## Production Dimensions



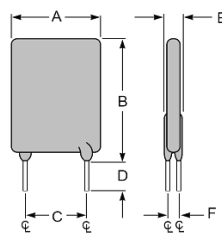
**Fig.1**  
Lead Size: 24AWG  
Φ 0.51 mm Diameter



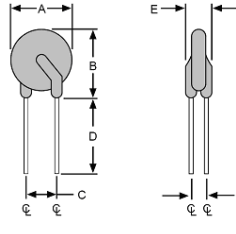
**Fig.2**  
Lead Size: 24AWG  
Φ 0.51 mm Diameter



**Fig.3**  
Lead Size: 22AWG  
Φ 0.65 mm Diameter



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



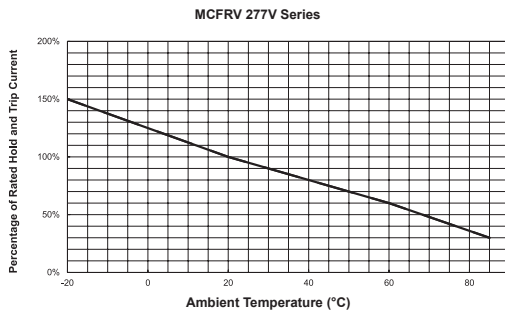
**Fig.5**  
Lead Size: 20AWG  
Φ 0.81 mm Diameter

Part Number	Figure	A	B	C	D	E	F
		Maximum	Maximum	Typical	Minimum	Maximum	Typical
MCFRV005-277F	1	7.4	12.7	5.1	7.6	3.8	1.6
MCFRV008-277F	2	7.4	12.2	5.1		3.8	1.6
MCFRV012-277F	2	8.1	12.8	5.1		3.8	1.6
MCFRV016-277F	2	7.4	14.2	5.1		3.8	1.6
MCFRV025-277F	3	8.9	15.2	5.1		3.8	1.8
MCFRV033-277F	3	12.6	15.5	5.1		3.8	1.8
MCFRV040-277F	3	12.6	15.5	5.1		3.8	1.8
MCFRV055-277F	4	12.6	16.5	5.1		4.1	1.9
MCFRV075-277F	4	15.8	20	5.1		4.8	1.9
MCFRV100-277F	4	16.3	21.7	10.2		5.1	1.9
MCFRV125-277F	5	18.8	24.5	10.2		5.3	1.9
MCFRV150-277F	5	23.8	28.3	10.2		5.3	1.9
MCFRV200-277F	4	25.2	30.6	10.2		6.1	1.9

Dimensions : Millimetres

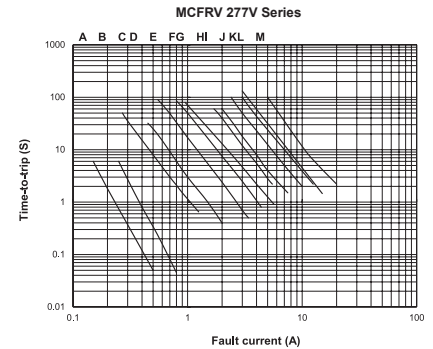
# Radial Leaded PTC Resettable Fuses **multicomp**PRO

## Thermal Derating Curve



## Typical Time-To-Trip at 23°C

A = MCFRV005-277F  
 B = MCFRV008-277F  
 C = MCFRV012-277F  
 D = MCFRV016-277F  
 E = MCFRV025-277F  
 F = MCFRV033-277F  
 G = MCFRV040-277F  
 H = MCFRV055-277F  
 I = MCFRV075-277F  
 J = MCFRV100-277F  
 K = MCFRV125-277F  
 L = MCFRV150-277F  
 M = MCFRV200-277F



## Part Number Table

Description	UL Approval	Holding Current	Trip Current	Part Number
Radial Leaded PTC Resettable Fuse, 277V AC	No	0.05A	0.2A	MCFRV005-277F
		0.08A	0.26A	MCFRV008-277F
		0.12A	0.3A	MCFRV012-277F
		0.16A	0.37A	MCFRV016-277F
		0.25A	0.56A	MCFRV025-277F
		0.33A	0.74A	MCFRV033-277F
	Yes	0.4A	0.9A	MCFRV040-277F
		0.55A	1.25A	MCFRV055-277F
		0.75A	1.5A	MCFRV075-277F
	No	1A	2A	MCFRV100-277F
	Yes	1.25A	2.5A	MCFRV125-277F
		1.5A	3A	MCFRV150-277F
		2A	4A	MCFRV200-277F

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