

# FUSES

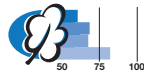
## Resettable fuses

# PFMU

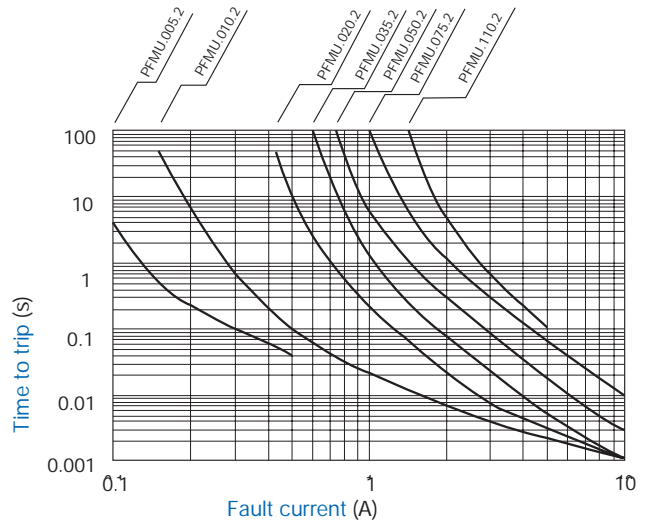
### Surface Mount PTC-Fuses Type PFMU

2,8 x 3,4 mm  
fast tripping  
Packaged per EIA 481-1

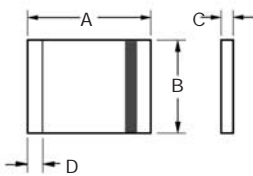
Agency recognition:  
UL, CSA, TÜV



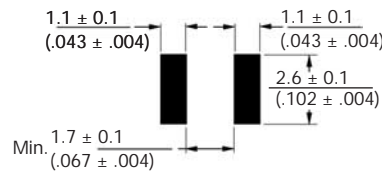
Typical Time to Trip at 23 °C



### Dimensions



### Solder pad layouts

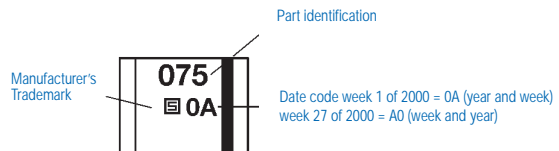


### Applications

- PC motherboards
- PC modems
- USB
- General electronics: Phones, fax machines, televisions, printers, video equipment, PDA

### Typical Part Marking

Layout may vary



### Environmental Characteristics

Operating/Storage Temperature	-40 °C to +85 °C	
Maximum Device Surface Temperature in Tripped State	125 °C	
Passive Aging	+85 °C, 1000 hours	± 5% typ. resist. change
Humidity Aging	+85 °C, 85% R.H. 1000 hours	± 10% typ. resist. change
Thermal Shock	+85 °C/-40 °C 20 times	± 10% typ. resist. change
Solvent Resistance	MIL-STD-202, Method 215	No change
Vibration	MIL-STD-883C, Method 2007.1, Condition A	No change

### Test Procedures And Requirements For Model PFMU Series

Test	Test Conditions	Accept/Reject Criteria
Visual/Mech.	Verify dimensions and materials	Per MF physical description
Resistance	In still air @ 23 °C	$R_{min} \leq R \leq R_{max}$
Time to Trip	At specified current, $V_{max}$ 23 °C	$T \leq \text{max. time to trip (sec.)}$
Hold Current	30 min. at $I_{hold}$	No trip
Trip Cycle Life	$V_{max}$ , $I_{max}$ , 100 cycles	No arcing or burning
Trip Endurance	$V_{max}$ , 48 hours	No arcing or burning

**Electrical Characteristics / Elektrische Daten**

Type	I <sub>max</sub> A	V <sub>max</sub> V	I <sub>hold</sub>	I <sub>trip</sub>	Initial Resistance		1 Hour (R1) Post-Reflow Resistance		Max. Time to trip at 23 °C/8A		Tripped Power Dissipation Watts at 23 °C
					Ohms at 23 °C		Amperes	Seconds	Watts at 23 °C		
					Hold	Trip	R <sub>min.</sub>	R <sub>1 max.</sub>	at 23 °C	at 23 °C	
PFMU.005.2	10	30	0.05	0.15	2.80	50.0	0.25	1.5	0.8		
PFMU.010.2	10	30	0.10	0.30	0.80	15.0	0.5	0.6	0.8		
PFMU.020.2	10	30	0.20	0.40	0.40	5.0	8.0	0.2	0.8		
PFMU.035.2	40	6	0.35	0.75	0.20	1.30	8.0	0.2	1.0		
PFMU.050.2	40	13.2	0.50	1.00	0.18	0.90	8.0	0.1	1.0		
PFMU.075.2	40	6	0.75	1.50	0.07	0.45	8.0	0.1	1.2		
PFMU.110.2	40	6	1.10	2.20	0.05	0.21	8.0	0.1	1.2		

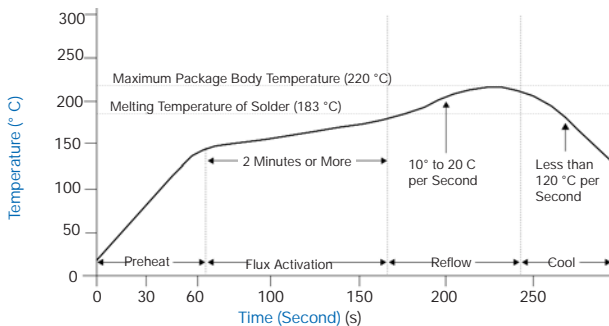
**Dimensions**

Model	A		B		C		D
	min.	max.	min.	max.	min.	max.	min.
PFMU.005.2	3.00 (0.118)	3.43 (0.135)	2.35 (0.092)	2.80 (0.110)	0.38 (0.015)	0.62 (0.025)	0.30 (0.012)
PFMU.010.2	3.00 (0.118)	3.43 (0.135)	2.35 (0.092)	2.80 (0.110)	0.38 (0.015)	0.62 (0.025)	0.30 (0.012)
PFMU.020.2	3.00 (0.118)	3.43 (0.135)	2.35 (0.092)	2.80 (0.110)	0.38 (0.015)	0.62 (0.025)	0.30 (0.012)
PFMU.035.2	3.00 (0.118)	3.43 (0.135)	2.35 (0.092)	2.80 (0.110)	0.38 (0.015)	0.62 (0.025)	0.30 (0.012)
PFMU.050.2	3.00 (0.118)	3.43 (0.135)	2.35 (0.093)	2.80 (0.110)	0.38 (0.015)	0.62 (0.024)	0.30 (0.012)
PFMU.075.2	3.00 (0.118)	3.43 (0.135)	2.35 (0.092)	2.80 (0.110)	0.38 (0.015)	0.62 (0.025)	0.30 (0.012)
PFMU.110.2	3.00 (0.118)	3.43 (0.135)	2.35 (0.092)	2.80 (0.110)	0.38 (0.015)	0.62 (0.025)	0.30 (0.012)

Packaging: 3000 pcs. per reel

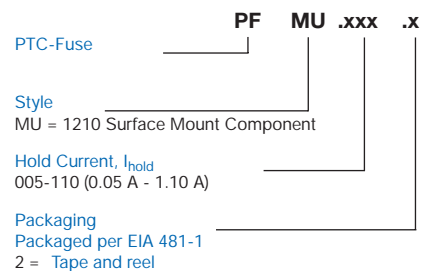
Dimensions in mm/inches

**Soldering Profile**



- Note
- PFMU models can be wave soldered and reworked.

**How To Order**



**Thermal Derating Chart-I<sub>hold</sub> (Amps)**

Type	Ambient Operating Temperature								
	-40 °C	-20 °C	0 °C	23 °C	40 °C	50 °C	60 °C	70 °C	85 °C
PFMU.005.2	0.08	0.07	0.06	0.05	0.04	0.04	0.03	0.03	0.02
PFMU.010.2	0.16	0.14	0.12	0.10	0.08	0.07	0.06	0.05	0.04
PFMU.020.2	0.32	0.28	0.24	0.20	0.16	0.14	0.12	0.10	0.06
PFMU.035.2	0.47	0.45	0.40	0.35	0.33	0.28	0.24	0.21	0.18
PFMU.050.2	0.76	0.67	0.58	0.50	0.43	0.40	0.36	0.32	0.28
PFMU.075.2	1.00	0.97	0.86	0.75	0.64	0.59	0.54	0.48	0.40
PFMU.110.2	1.60	1.42	1.26	1.10	0.94	0.86	0.80	0.70	0.58