




## POWrFuse™ PF-E Series Features

- Designed to UL 248-19 (gPV) photovoltaic fuse standard
- 15-30 A ratings available
- Up to 20 kA interrupting rating
- Available in ferrule or PCB mounting options
- RoHS compliant\* and halogen free\*\*
- Agency recognition: 



## PF-E Series – Photovoltaic (gPV) Power Fuses

### Clearing Time Characteristics for Series

% of Current Rating	Clearing Time at 25 °C	
	Minimum	Maximum
100 %	4 hours	—
135 %	—	60 minutes
200 %	—	4 minutes

### Additional Information


Click these links for more information:



### Environmental Characteristics

Operating Temperature... -55 °C to +125 °C

### Electrical Characteristics

Model	Rated Current (A)	Nominal Resistance (Ω) <sup>***</sup>	Rated Voltage	Interrupting Rating	Nominal I <sup>2</sup> t (A <sup>2</sup> s) <sup>****</sup>	Watts Loss (W)		Agency Recognition 
						@ 70 % I <sub>n</sub>	@ 100 % I <sub>n</sub>	
PF-EC1-15	15	0.00854	1000 VDC	20 kA @ 1000 VDC	365	1.24	3.06	<a href="#">E526252</a>
PF-ET1-15								
PF-EC1-20	20	0.00505			804.3	1.33	3.22	
PF-ET1-20								
PF-EC1-25	25	0.00396			1202	1.66	4.28	
PF-ET1-25								
PF-EC1-30	30	0.00302			2229	1.78	4.56	
PF-ET1-30								

\*\*\* Resistance value measured with ≤10 % rated current at 25 °C ambient.

\*\*\*\* Nominal I<sup>2</sup>t value measured at 20 kA / 1000 VDC.



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**CALIFORNIA WARNING:** Can expose you to lead, a carcinogen and reproductive toxicant.

See [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

\* RoHS Directive 2015/863, Mar 31, 2015 and Annex.

\*\* Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

"POWrFuse" is a trademark of Bourns, Inc.

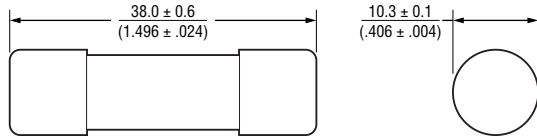
Specifications are subject to change without notice. Users should verify actual device performance in their specific applications. The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at [www.bourns.com/docs/legal/disclaimer.pdf](http://www.bourns.com/docs/legal/disclaimer.pdf).

# PF-E Series – Photovoltaic (gPV) Power Fuses



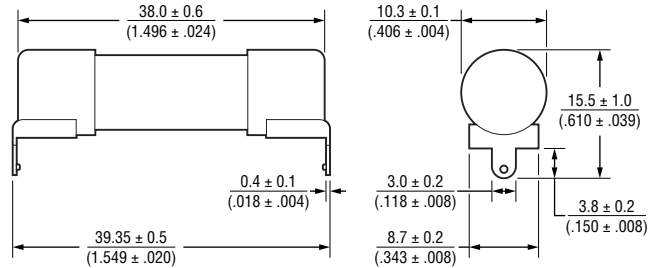
## Product Dimensions

### Ferrule/C1

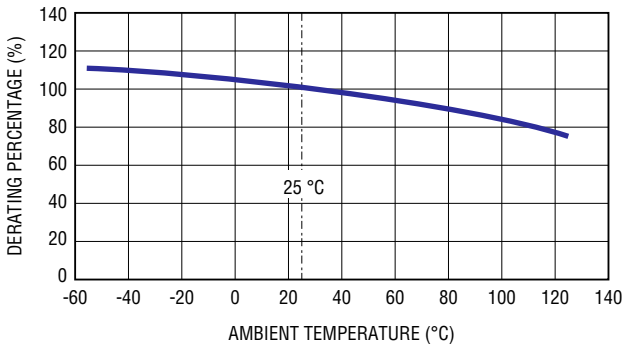


DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

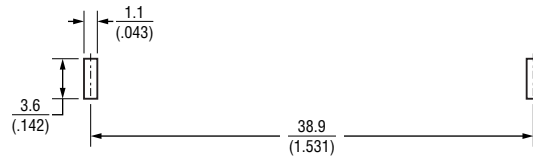
### PCB Mounting/T1



## Current Rating Thermal Derating Curve



## Recommended Drilling Pattern



## Wave Soldering Recommendations (for PCB Mounting)

Profile Feature	Pb-Free Assembly
Preheat: Temperature Max. Temperature Min.	150 °C 100 °C
Solder Pot Temperature	280 °C max.
Solder Dwell Time	8 seconds max.

## Hand Soldering Recommendations (for PCB Mounting)

Soldering Iron Temperature	Heating Time
350 °C ± 5 °C	40 sec. max.

## Typical Part Marking

Model	Note	Ink Color	Marking
PF-EC1-15	15	Black	
PF-EC1-20	20		
PF-EC1-25	25		
PF-EC1-30	30		
PF-ET1-15	15	Black	
PF-ET1-20	20		
PF-ET1-25	25		
PF-ET1-30	30		

## How to Order

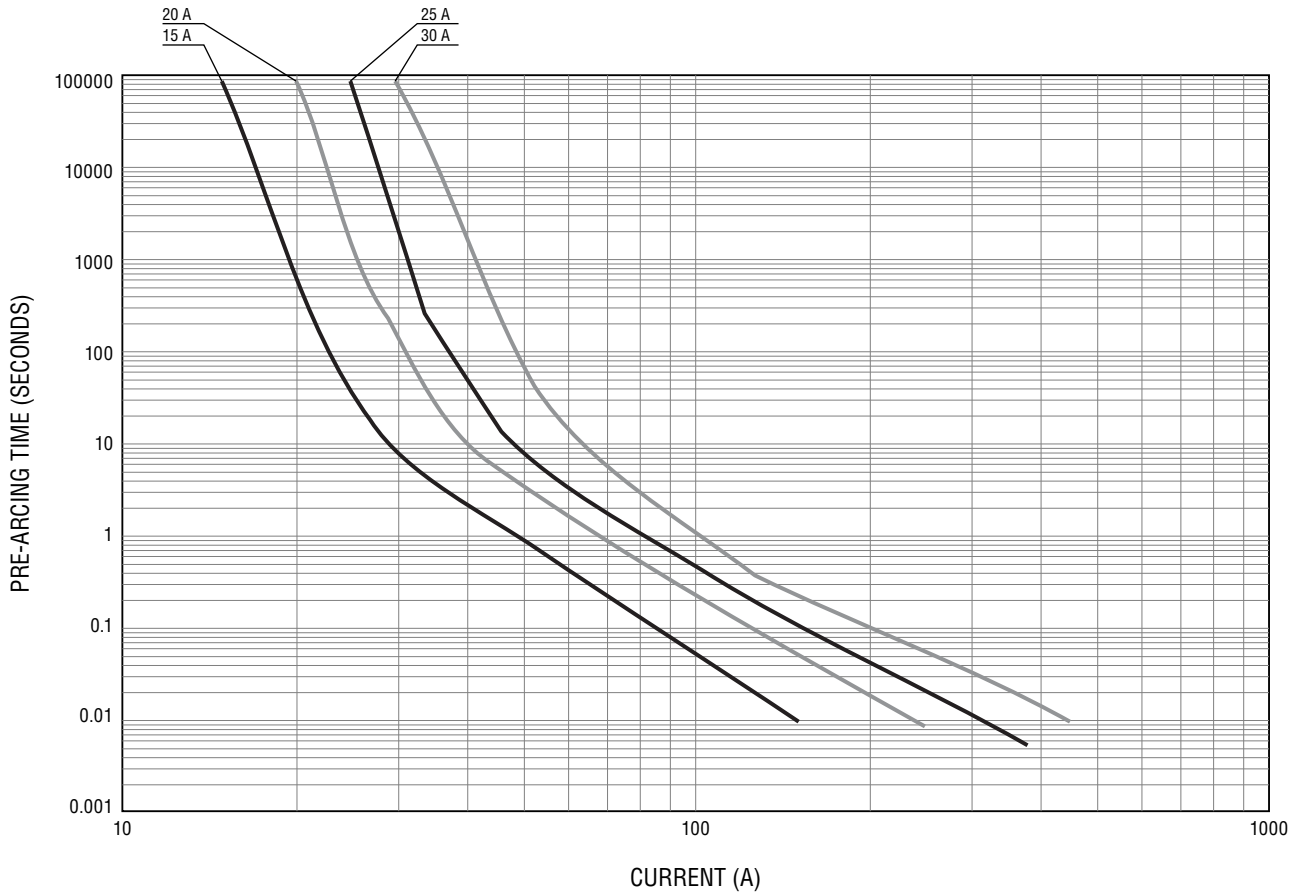
PF - E C1 - 15

POWRFuse™ \_\_\_\_\_  
 Product Designator \_\_\_\_\_  
 Series Name \_\_\_\_\_  
 Mounting Type \_\_\_\_\_  
 C1 = Ferrule, Type 1  
 T1 = PCB Mounting, Type 1  
 Rated Current \_\_\_\_\_  
 15 - 30 = 15 A - 30 A

## Packaging

Model	Quantity
PF-EC1	10 pcs. / box
PF-ET1	50 pcs. / tray

Average Pre-Arcing Time vs. Current Curves



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