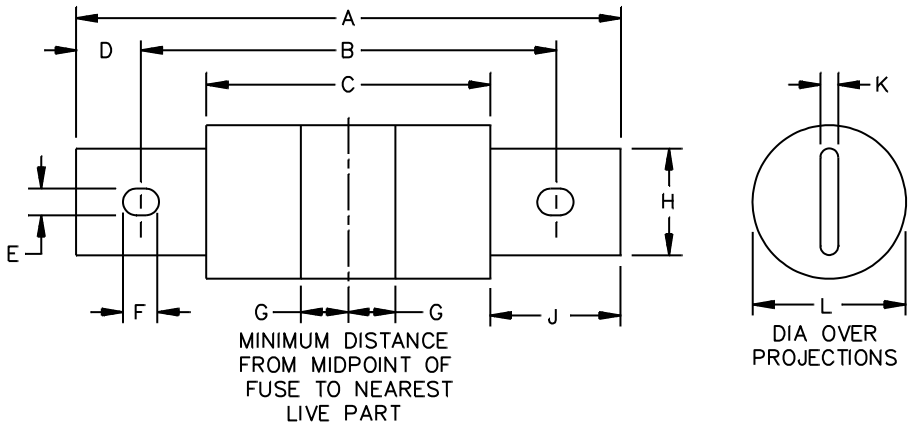
INCH-POUND
W-F-1814/8D
15 November 2013
SUPERSEDING
W-F-1814/8C
27 July 2009

FEDERAL SPECIFICATION SHEET

# FUSE, CARTRIDGE, HIGH INTERRUPTING CAPACITY, CLASS J (CURRENT-LIMITING) 600 VOLTS, 101-200 AMPERES

The General Services Administration has authorized the use of this federal specification, by all federal agencies.

The complete requirements for procuring the fuses described herein shall consist of this document and the latest issue in effect of W-F-1814.




| Ltr | Inches | | mm | | Ltr | Inches | | mm | |
|---|---|---|---|---|---|---|---|---|---|
| | Min | Max | Min | Max | | Min | Max | Min | Max |
| A | 5.660 | 5.840 | 143.76 | 148.34 | G | .500 | --- | 12.70 | --- |
| B | 4.320 | 4.440 | 109.73 | 112.78 | H | 1.090 | 1.160 | 27.69 | 29.46 |
| C | 2.970 | 3.030 | 75.44 | 76.96 | J | 1.380 (REF) | | 35.05 (REF) | |
| D | .690 (REF) | | 17.53 (REF) | | K | .185 | .191 | 4.70 | 4.85 |
| E | .276 | .286 | 7.010 | 7.26 | L | --- | 1.620 | --- | 41.15 |
| F | .380 | .440 | 9.652 | 11.18 | | | | | |

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerances are ±.02 (0.51 mm) for two-place decimals and ±.005 (0.13 mm) for three-place decimals.

FIGURE 1. Configuration and dimensions.

REQUIREMENTS:

Interface and physical dimensions: See figure 1.

Physical: Nonrenewable.

Terminals: Knife blade type:

Material: Brass, copper or copper alloy.

Strength: 20 pound-inches torque between body and knife blades.

Body:

Insulating material: Ceramic, melamine-impregnated glass fiber, or the equivalent.

Electrical:

Voltage: 600 volts or less.

Frequency: 48 Hz to 60 Hz.

Current: See table I.

Current carrying capacity: 100 percent indefinitely with temperature rise not to exceed 75°C above ambient on the ferrules.

Overload interrupt: Shall interrupt within 2 hours at 135 percent of rated current and within 10 minutes at 200 percent of rated current.

Interrupting capacity rating: 200,000 amperes rms symmetrical at 600 volts, 60 Hz and a power factor of 20 percent or less. Closing angle shall be essentially at the zero of the voltage wave (maximum offset) or later, to produce start of arcing within 30 electrical degrees prior to system peak voltage.

Threshold ratio: 30 maximum.

Maximum peak let-thru current: See table I.

Maximum clearing $I^2T$: See table I.

Applicable fuseholders: Class J for blade type fuses in accordance with UL 4248-8.

Part or Identifying Number (PIN): See table I.

TABLE I. Electrical characteristics. 1/

| Government PIN | Current rating (amperes) | Maximum peak let-thru current amperes | Maximum clearing $I^2T \times 10^3$ |
|---|---|---|---|
| WF1814/08-001 | 110 | 14,500 | 100 |
| WF1814/08-002 | 125 | 15,500 | 150 |
| WF1814/08-003 | 150 | 17,000 | 175 |
| WF1814/08-004 | 175 | 18,500 | 225 |
| WF1814/08-005 | 200 | 20,000 | 300 |

1/ For silver plated terminals, the designator "S" is added after the dash number.

Referenced documents. In addition to W-F-1814, this document references the following:

UL 4248-8

The margins of this specification sheet are marked with vertical lines to indicate where changes from the previous issue were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the last previous issue.

MILITARY INTEREST:

Custodians:
Army - CR
Navy - EC
Air Force - 85
DLA - CC

Review activities:
Army - AT, CR4
Navy - OS
NSA - NS

CIVIL AGENCY COORDINATING ACTIVITIES:

GSA - FAS

Preparing activity:

DLA - CC

(Project 5920-2013-010)

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at https://assist.dla.mil.