

INCH-POUND

MIL-PRF-15160/61E

12 October 1999

SUPERSEDING

MIL-PRF-15160/61D

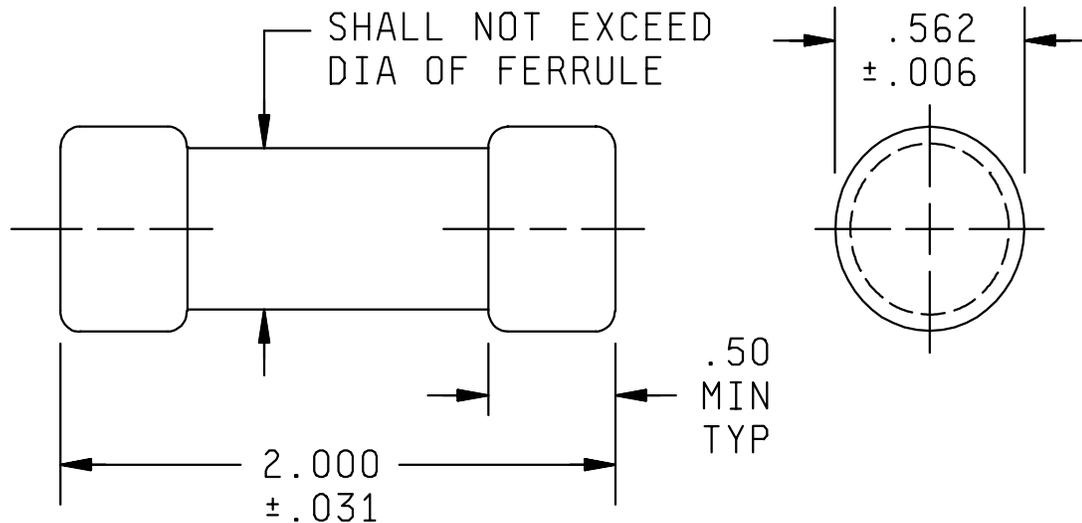
13 February 1998

PERFORMANCE SPECIFICATION SHEET

FUSES, INSTRUMENT, POWER, AND TELEPHONE
(NONINDICATING), STYLE F61

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist of this specification and MIL-PRF-15160.



Inches	mm
.006	0.15
.031	0.79
.50	12.7
.562	14.27
2.000	50.80

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.

FIGURE 1. Style F61, characteristic C.

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REQUIREMENTS:

Interface and physical dimensions: See figure 1.

Case: Glass melamine.

Ferrule: Brass, copper, bronze, or copper alloy.

Finish: Nickel or bright alloy plate, silver plated when specified.

Terminal strength: Method 211 of MIL-STD-202, test condition E, 2 inch-pound torque between ferrules and fuse body.

Electrical:

Current rating: See table I.

Current carrying capacity: 110 percent of rated current.

Voltage rating: See table I.

Characteristic: Characteristic C only.

Overload interrupt: Within 1 hour at 135 percent of rated current; and within 2 minutes at 200 percent.

Short circuit interrupt: 200,000 A at 500 V ac (symmetrical), 150,000 A at 500 V dc.

Shock: Method 207 of MIL-STD-202, HI shock.

Vibration: Method 204 of MIL-STD-202, test condition A (except 5g peak).

Type designation: Type designation shall be as specified in table I.

TABLE I. Type designation. 1/

Style	Characteristic	Voltage	Current
F61	C	500V	1A
F61	C	500V	2A
F61	C	500V	3A
F61	C	500V	5A
F61	C	500V	6A
F61	C	500V	8A
F61	C	500V	10A
F61	C	500V	15A
F61	C	500V	20A
F61	C	500V	25A
F61	C	500V	30A

1/ For silver plated terminals, the designator "S" is added after the current rating.

VERIFICATION:

Qualification inspections: The number of qualification samples required shall be:

- a. 24 samples maximum current rating of each voltage and design.
- b. 24 samples minimum current rating of each voltage and design.

NOTE: If labels are used, five additional samples of any rating are required.

Sample size: The number of group III samples shall be twelve samples each of the maximum and minimum current ratings. The samples shall be divided as shown in table II.

TABLE II. Short circuit test.

Number of samples	Short circuit current	Test voltage
3	5,000 A	500 V ac <u>1/</u>
3	200,000 A	500 V ac <u>1/</u>
3	5,000 A	500 V dc
3	150,000 A	500 V dc

1/ A 600 volt ac test voltage may be used.

Group C inspection: Group C inspection shall be performed on short circuit current ratings of 5,000 A at 500 V ac; 200,000 A at 500 V ac; and 5,000 A at 500 V dc. The 150,000 A at 500 V dc short circuit current test is not required to be performed for group C testing.

INSPECTION ROUTINE:

AC short circuit test: AC short circuit tests shall be performed at the currents shown in table II at not less than 500 volts, single phase, and not greater than 20 percent power factor, lagging. The current shall be applied within plus or minus 10 degrees of the zero point of the voltage wave.

DC short circuit test: DC short circuit tests shall be performed at the currents shown in table II at not less than 500 volts. The rate of rise shall be between 25,000,000 and 30,000,000 amperes per second.

Cross-reference: For applicable cross-reference see table III. The existing stocks of superseded items may be used. When exhausted, the superseding parts shall be used.

TABLE III. Cross-reference.

Superseding number	Superseded numbers for CAGE	
	81349	96906
F61C500V1A	F61H1R00C	MS15250-1
F61C500V2A	N/A	N/A
F61C500V3A	F61H3R00C	MS15250-3
F61C500V5A	N/A	N/A
F61C500V6A	F61H6R00C	MS15250-6
F61C500V8A	N/A	N/A
F61C500V10A	F61H10R0C	MS15250-10
F61C500V15A	F61H15R0C	MS15250-15
F61C500V20A	F61H20R0C	MS15250-20
F61C500V25A	F61H25R0C	MS15250-25
F61C500V30A	F61H30R0C	MS15250-30

Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extent of the changes.

Custodians:

Army - CR
 Navy - SH
 Air Force - 11
 DLA - CC

Preparing activity:

DLA - CC

(Project 5920-0607-11)

Review activities:

Army - AR, AT, CR4, MI
 Navy - AS, CG, MC, OS, YD2
 Air Force - 19, 99