INCH-POUND

MIL-PRF-15160/63F
2 November 2011
MIL-PRF-15160/63E
17 August 2006

PERFORMANCE SPECIFICATION SHEET

FUSES, INSTRUMENT, POWER, AND TELEPHONE (NONINDICATING), STYLE F63

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 sheet and MIL-PRF-15160.

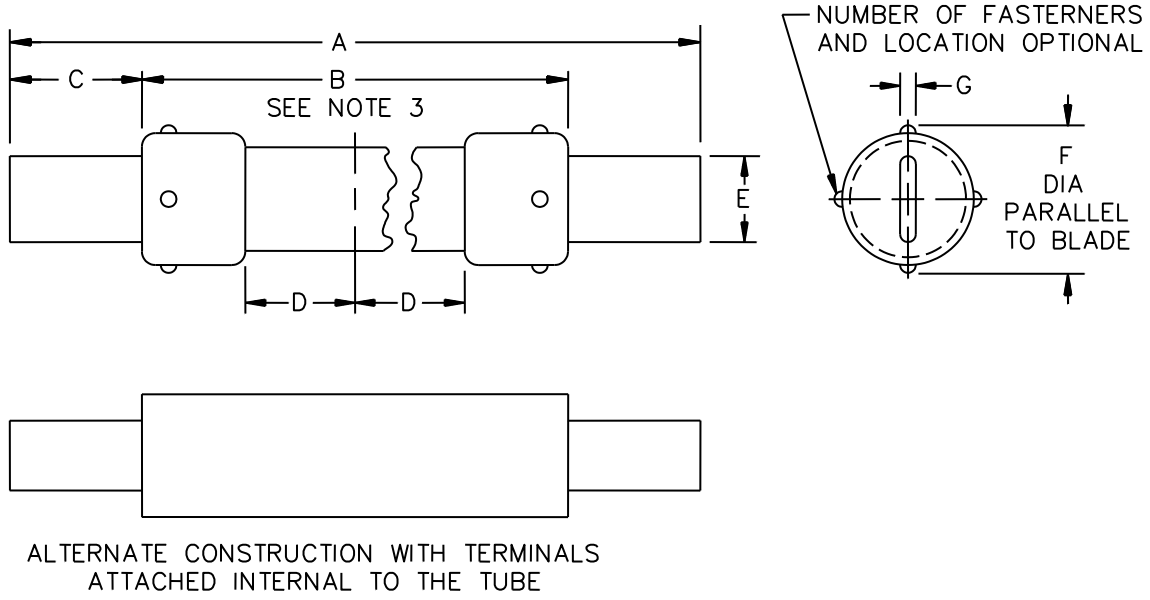

FIGURE 1. Style F63, characteristic C.

Ltr	Inches		mm	
	Min	Max	Min	Max
A	5.813	5.937	147.65	150.80
B	3.375	---	85.73	---
C	1.000	---	25.40	---
D	1.031	---	26.19	---
E	.715	.785	18.16	19.94
F	---	1.312	---	33.32
G	.122	.128	3.10	3.25

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. The length of the cylindrical body may be less than the indicated value if other acceptable interference means (pins through blades, collars, and so forth) are provided to prevent mounting the fuse in a fuseholder that will accommodate a fuse rated in the next lower bracket of current ratings.

FIGURE 1. Style F63, characteristic C - Continued.

REQUIREMENTS:

Interface and physical dimensions: See figure 1.

Case: Glass melamine.

Knifeblade: 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 pound-inch torque.

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 6 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, 500 Hz).

Part or Identifying Number (PIN): The PIN shall be constructed from table I (e.g., F63C500V70A).

TABLE I. Part or Identifying Number. 1/

Style	Characteristic	Voltage	Current
F63	C	500V	70A
F63	C	500V	80A
F63	C	500V	90A
F63	C	500V	100A

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 1/
3	200,000 A	500 V ac 1/
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
F63C500V70A	F63H70R0C	MS15252-1
F63C500V80A	F63H80R0C	MS15252-2
F63C500V90A	F63H90R0C	MS15252-3
F63C500V100A	F63H100R0C	MS15252-4

Referenced documents. In addition to MIL-PRF-15160, this document references the following:

MIL-STD-202

The margins of this specification 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.

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

Review activities:
Army - AT, CR4, MI
Navy - AS, CG, MC, OS, YD
Air Force - 19, 99
DTRA - DS

Preparing activity:
DLA - CC

(Project 5920-2011-061)

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.daps.dla.mil.