INCH-POUND

MIL-PRF-15160/66F
2 November 2011
SUPERSEDING
MIL-PRF-15160/66E
17 August 2006

PERFORMANCE SPECIFICATION SHEET

FUSES, INSTRUMENT, POWER, AND TELEPHONE (NONINDICATING), STYLE F66

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.

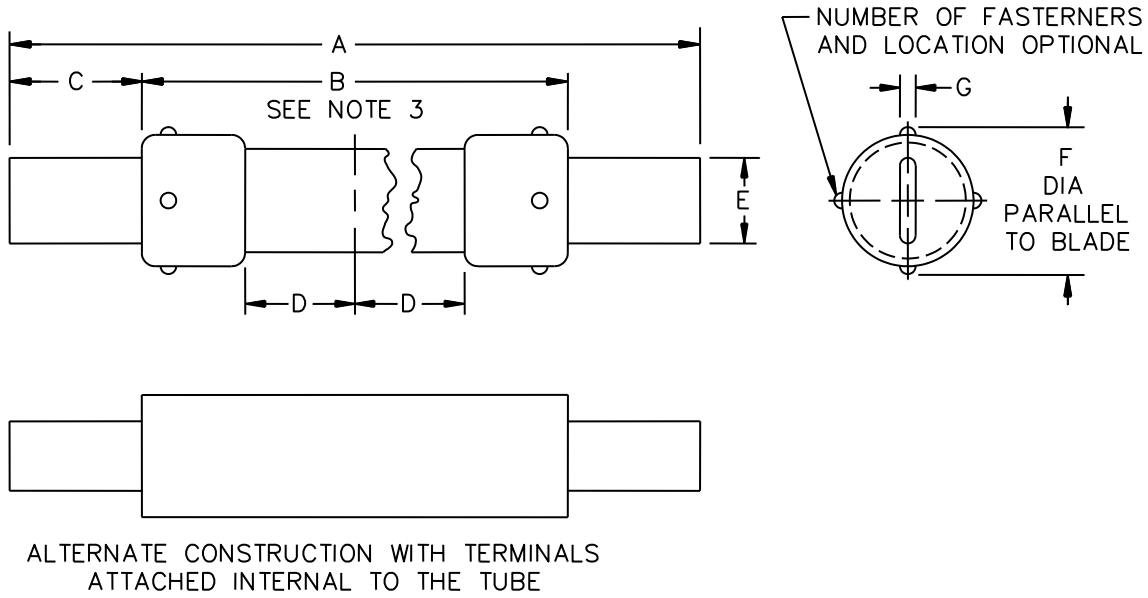

FIGURE 1. Style F66, characteristic C.

Ltr	Inches		mm	
	Min	Max	Min	Max
A	10.281	10.469	261.14	265.91
B	5.188	---	131.78	---
C	2.250	---	57.15	---
D	1.531	---	38.89	---
E	1.965	2.035	49.91	51.69
F	---	2.906	---	73.81
G	.247	.253	6.27	6.43

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 F66, 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, 5 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 2 hour at 135 percent of rated current; and within 12 minutes at 200 percent.

Short circuit interrupt: 200,000 A at 500 V ac (symmetrical), 150,000A 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., F66C500V450A).

TABLE I. Type designation. 1/

Style	Characteristic	Voltage	Current
F66	C	500V	450A
F66	C	500V	500A
F66	C	500V	600A

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

Temperature rise: Temperature rise shall be not greater than the values shown in table II.

TABLE II. Allowable temperature rise.

Casing or body		Terminal	
Thermometer	Thermocouple	Thermometer	Thermocouple
50°C	90°C	75°C	90°C

VERIFICATION:

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

a. 32 samples maximum current rating of each voltage and design.

b. 32 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 III. 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 500V 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 IV. The existing stocks of superseded items may be used. When exhausted, the superseding parts shall be used.

TABLE IV. Cross-reference.

Superseding number	Superseded numbers for CAGE	
	81349	96906
F66C500V450A	F66H450R0C	MS15255-1
F66C500V500A	F66H500R0C	MS15255-2
F66C500V600A	F66H600R0C	MS15255-3

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

Preparing activity:
DLA - CC

(Project 5920-2011-064)

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

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.