

INCH-POUND

MIL-PRF-15160/9G
15 November 2011

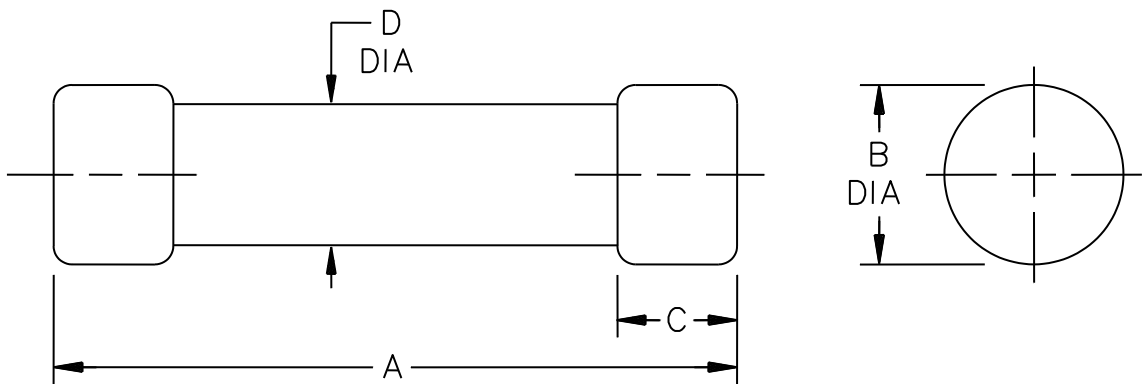
SUPERSEDING
MIL-PRF-15160/9F
7 July 2006

PERFORMANCE SPECIFICATION SHEET

FUSES, INSTRUMENT, POWER, AND TELEPHONE
(NONINDICATING), STYLE F09

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](#).



Ltr	Inches		mm	
	Min	Max	Min	Max
A	1.469	1.531	37.31	38.89
B	.402	.415	10.21	10.54
C	---	.406	---	10.31
D	---	.400	---	10.16

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

FIGURE 1. Style F09, fuse.

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REQUIREMENTS:

Interface and physical dimensions: See figure 1.

Terminals: Ferrule type.

Material: Brass, copper, or copper alloy.

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

Strength: [Method 211 of MIL-STD-202](#), test condition E, 2 inch-pound torque between ferrules and fuse body.

Body: Fiber tube.

Electrical:

Current rating: See table I.

Voltage rating: See table I.

Characteristic: See table I.

Overload interrupt:

Characteristic A: Maximum 1 hour at 135 percent of rated current and a maximum of 2 minutes at 200 percent of rated current.

Characteristic B: 1/10A through 30A	Maximum 1 hour at 135 percent of rated current.
1/10A through 2 8/10A	Minimum of 5 seconds at 200 percent of rated current.
3 2/10A through 30A	Minimum of 12 seconds at 200 percent of rated current.

Short circuit interrupt: See table I.

Shock:	F09A 1A through 30A	Method 207 of MIL-STD-202 (HI shock)
	F09B 1/10A through 1 6/10A	Method 213 of MIL-STD-202 , test condition I
	F09B 1 8/10A through 30A	Method 207 of MIL-STD-202 (HI shock)

Vibration:	F09A 1A through 30A	Method 204 of MIL-STD-202 , test condition A (except 5g peak)
	F09B 1/10A through 8/10A	Method 201 of MIL-STD-202
	F09B 1A through 30A	Method 204 of MIL-STD-202 , test condition A (except 5g peak)

Part or Identifying Number (PIN): The PIN shall be constructed from table I (e.g., F09A250V1A, or F09B250V1/10A).

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TABLE I Part or Identifying Number and electrical rating.

Style	PIN			AC short circuit interrupt.		
	Characteristic	Maximum voltage	Current rating $\frac{2}{}$ (amperes)	32 volts	125 volts	250 volts
F09	A	250V	1A	10,000A	10,000A	35A
F09	A	250V	2A	10,000A	10,000A	35A
F09	A	250V	3A	10,000A	10,000A	35A
F09	A	250V	3 1/2A	10,000A	10,000A	35A
F09 $\frac{1}{2}$	A	250V	4A	10,000A	10,000A	35A
F09	A	250V	5A	10,000A	10,000A	100A
F09	A	250V	6A	10,000A	10,000A	100A
F09	A	250V	6 1/4A	10,000A	10,000A	100A
F09	A	250V	7A	10,000A	10,000A	100A
F09	A	250V	8A	10,000A	10,000A	100A
F09	A	250V	10A	10,000A	10,000A	100A
F09	A	250V	15A	10,000A	10,000A	200A
F09	A	250V	20A	10,000A	10,000A	200A
F09	A	250V	25A	10,000A	10,000A	750A
F09	A	250V	30A	10,000A	10,000A	750A
F09	B	250V	1/10A	10,000A	10,000A	35A
F09	B	250V	15/100A	10,000A	10,000A	35A
F09	B	250V	2/10A	10,000A	10,000A	35A
F09	B	250V	3/10A	10,000A	10,000A	35A
F09	B	250V	4/10A	10,000A	10,000A	35A
F09	B	250V	1/2A	10,000A	10,000A	35A
F09	B	250V	6/10A	10,000A	10,000A	35A
F09	B	250V	8/10A	10,000A	10,000A	35A
F09	B	250V	1A	10,000A	10,000A	35A
F09 $\frac{1}{2}$	B	250V	1 1/8A	10,000A	10,000A	35A
F09	B	250V	1 1/4A	10,000A	10,000A	35A
F09 $\frac{1}{2}$	B	250V	1 4/10A	10,000A	10,000A	35A
F09	B	250V	1 6/10A	10,000A	10,000A	35A
F09 $\frac{1}{2}$	B	250V	1 8/10A	10,000A	10,000A	35A
F09	B	250V	2A	10,000A	10,000A	35A
F09 $\frac{1}{2}$	B	250V	2 1/4A	10,000A	10,000A	35A
F09	B	250V	2 1/2A	10,000A	10,000A	35A
F09 $\frac{1}{2}$	B	250V	2 8/10A	10,000A	10,000A	35A
F09	B	250V	3 2/10A	10,000A	10,000A	35A
F09 $\frac{1}{2}$	B	250V	3 1/2A	10,000A	10,000A	35A
F09	B	250V	4A	10,000A	10,000A	35A
F09 $\frac{1}{2}$	B	250V	4 1/2A	10,000A	10,000A	100A
F09	B	250V	5A	10,000A	10,000A	100A

See footnotes at end of table.

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TABLE I Part or Identifying Number and electrical ratings - Continued.

Style	Characteristic	PIN		AC short circuit interrupt.		
		Maximum voltage	Current rating <u>2/</u> (amperes)	32 volts	125 volts	250 volts
F09 <u>1/</u>	B	250V	5 6/10A	10,000A	10,000A	100A
F09	B	250V	6 1/4A	10,000A	10,000A	100A
F09 <u>1/</u>	B	250V	7A	10,000A	10,000A	100A
F09	B	250V	8A	10,000A	10,000A	100A
F09 <u>1/</u>	B	250V	9A	10,000A	10,000A	100A
F09	B	250V	10A	10,000A	10,000A	100A
F09 <u>1/</u>	B	125V	12A	10,000A	10,000A	Not rated
F09	B	125V	15A	10,000A	10,000A	Not rated
F09	B	32V	20A	10,000A	Not rated	Not rated
F09	B	32V	25A	10,000A	Not rated	Not rated
F09	B	32V	30A	10,000A	Not rated	Not rated

1/ INACTIVE FOR NEW DESIGN AFTER 30 JANUARY 1970.

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

INSPECTION ROUTINE:

Short circuit interrupt: The number of group III samples for qualification and qualification retention (group C) testing shall consist of 4 sample fuses of each of the types and of the current ratings as shown in table II. Short circuit interrupt tests shall be conducted at the ac voltage indicated, and the fuses shall withstand a minimum short circuit current as shown in table II.

TABLE II. Short circuit tests.

Fuse type	Current rating	Short circuit current	AC test voltage
F09A	4A	35A	250V
F09A	10A	100A	250V
F09A	20A	200A	250V
F09A	30A	750A	250V
F09A	30A	10,000A	125V
F09B	4A	35A	250V
F09B	10A	100A	250V
F09B	15A	10,000A	125V
F09B	30A	10,000A	32V

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.

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TABLE III. Cross reference.

Superseding number	Superseded numbers for CAGE						
	81349	96906	96906	71400	72076	75915	71424
F09A250V 1A <u>1/</u>	F09G1R00A <u>1/</u>	MS90085-9 <u>2/</u>	MS90084-1 <u>1/</u>	BAN1	MOL1	525001	
F09A250V 2A	F09G2R00A	MS90085-15	MS90084-2	BAN2	MOL2	525002	
F09A250V 3A	F09G3R00A	MS90085-19	MS90084-3	BAN3	MOL3	525003	
F09A250V 3 1/2A	F09G3R50A	MS90085-21		BAN3 1/2	MOL3 1/2	52503.5	
F09A250V 4A	F09G4R00A	MS90085-22		BAN4	MOL4	525004	
F09A250V 5A	F09G5R00A	MS90085-24	MS90084-4	BAN5	MOL5	525005	
F09A250V 6A	F09G6R00A	MS90085-26		BAN6	MOL6	525006	
F09A250V 6 1/4A	F09G6R25A	MS90085-27		BAN6 1/4	MOL6 1/4	5256.25	
F09A250V 7A	F09G7R00A	MS90085-28		BAN7	MOL7	525007	
F09A250V 8A	F09G8R00A	MS90085-29		BAN8	MOL8	525008	
F09A250V 10A	F09G10R0A	MS90085-31	MS90084-5	BAN10	MOL10	525010	
F09A250V 15A	F09G15R0A	MS90085-32	MS90084-6	BAN15	MOL15	525015	
F09A250V 20A	F09G20R0A	MS90085-33	MS90084-7	BAN20	MOL20	525020	
F09A250V 25A	F09G25R0A	MS90085-34	MS90084-8	BAN25	MOL25	525025	
F09A250V 30A	F09G30R0A	MS90085-35	MS90084-9	BAN30	MOL30	525030	
F09B250V 1/10A	F09GR100B	MS90085-36		FNM1/10			
F09B250V 15/100A	F09GR150B	MS90085-37		FNM1 15/100			
F09B250V 2/10A	F09GR200B	MS90085-38		FNM2/10			
F09B250V 3/10A	F09GR300B	MS90085-39		FNM3/10			
F09B250V 4/10A	F09GR400B	MS90085-40		FNM4/10			
F09B250V 1/2A	F09GR500A	MS90085-41		FNM1/2			
F09B250V 6/10A	F09GR600A	MS90085-42		FNM6/10			
F09B250V 8/10A	F09GR800B	MS90085-43		FNM8/10			
F09B250V 1A	F09G1R00B	MS90085-44	MS90084-10	FNM1	MEN1		
F09B250V 1 1/8A	F09G1R12B	MS90085-45		FNM1 1/8	MEN1 1/8		
F09B250V 1 1/4A	F09G1R25B	MS90085-46		FNM1	MEN1		
F09B250V 1 4/10A	F09G1R40B	MS90085-47		FNM1 4/10	MEN1 4/10		
F09B250V 1 6/10A	F09G1R60B	MS90085-48		FNM1 6/10	MEN1 6/10		
F09B250V 1 8/10A	F09G1R80B	MS90085-49		FNM1 8/10	MEN1 8/10		
F09B250V 2A	F09G2R00B	MS90085-50	MS90084-11	FNM2	MEN2		
F09B250V 2 1/4A	F09G2R25B	MS90085-51		FNM2 1/4	MEN2 1/4		
F09B250V 2 1/2A	F09G2R50B	MS90085-52		FNM2 1/2	MEN2 1/2		
F09B250V 2 8/10A	F09G2R80B	MS90085-53		FNM2 8/10	MEN2 8/10		
F09B250V 3 1/10A	F09G3R20B	MS90085-55		FNM3 1/10	MEN3 1/10		
F09B250V 3 1/2A	F09G3R50B	MS90085-56		FNM3 1/2	MEN3 1/2		
F09B250V 4A	F09G4R00B	MS90085-57		FNM4	MEN4		
F09B250V 4 1/2A	F09G4R50B	MS90085-58		FNM4.5	MEN4.5		
F09B250V 5A	F09G5R00B	MS90085-59		FNM5	MEN5		
F09B250V 5 6/10A	F09G5R60B	MS90085-60		FNM5 6/10	MEN5 6/10		
F09B250V 6 1/4A	F09G6R25B	MS90085-62		FNM6 1/4	MEN6 1/4		
F09B250V 7A	F09G7R00B	MS90085-63		FNM7	MEN7		
F09B250V 8A	F09G8R00B	MS90085-64		FNM8	MEN8		
F09B250V 9A	F09G9R00B	MS90085-65		FNM9	MEN9		
F09B250V 10A <u>1/</u>	F09D10R0B <u>1/</u>	MS90085-66 <u>2/</u>	MS90084-14 <u>1/</u>	FNM10	MEN10		
F09B125V 12A	F09D12R0B			FNM12	N/A		
F09B125V 15A	F09D15R0B	MS90085-67	MS90084-15	FNM15	MEN15		TRM15
F09B32V 20A	F09D20R0B	MS90085-68	MS90084-16	FNM20	MEN20		TRM20
F09B32V 25A	F09D25R0B	MS90085-69	MS90084-17	FNM25	MEN25		TRM25
F09B32V 30A	F09D30R0B	MS90085-70	MS90084-18	FNM30	MEN30		TRM30

1/ A letter "S" following the part number signifies silver plating.

2/ A second dash number (-1) signifies silver plating.

Referenced documents. In addition to [MIL-PRF-15160](#), this document references the following:

[MIL-STD-202](#)

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