

INCH-POUND

MIL-PRF-23419/1J

15 April 1998

SUPERSEDING

MIL-PRF-23419/1H

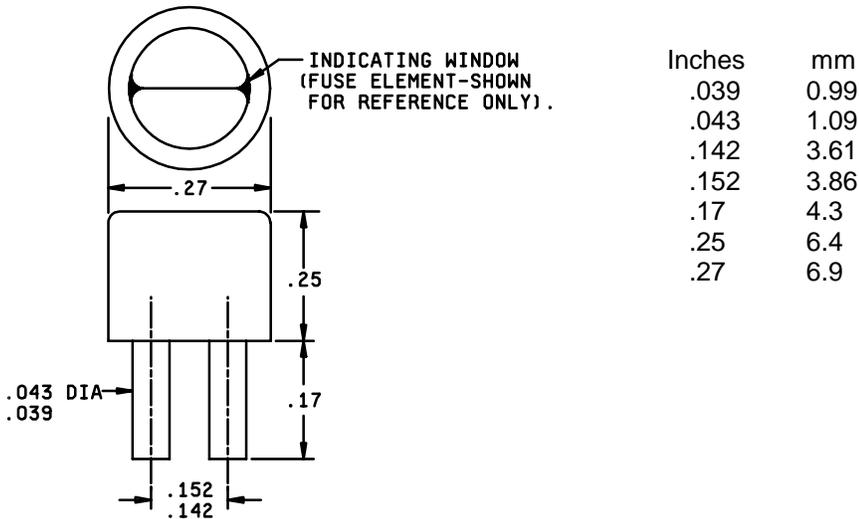
22 November 1985

PERFORMANCE SPECIFICATION SHEET

FUSES, INSTRUMENT TYPE,  
STYLE FM01 (INDICATING)

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

The complete requirements for acquiring the fuses described herein shall  
consist of this document and the latest issue of MIL-PRF-23419.



NOTES:

- 1. Dimensions are in inches.
- 2. Metric equivalents are given for general information only.
- 3. Unless otherwise specified, tolerance is  $\pm 0.02$  (0.5 mm).

FIGURE 1. Style FM01 fuses.

REQUIREMENTS:

Interface and physical dimensions: See figure 1.

Applicable fuseholder: MIL-PRF-19207/26, type FHN42W.

Case material: Ceramic.

Terminals:

Material: Brass.

Finish: See table I.

Strength: 9 pounds.

Current rating, nominal: See table I.

Voltage rating: See table I.

Current carrying capacity: 100 percent (at all temperatures between -55 °C and +85°C). Connecting wire shall be #14 and fuseholders shall not be spaced closer than 1 inch (25.4 mm) apart.

Resistance: Not applicable.

Overload interrupt: See table I.

Short circuit interrupt: See table I.

Shock:

Method I for fuses rated 1/64A or less.

Method II for fuses rated more than 1/64A.

Thermal shock: Test condition B of MIL-STD-202, test condition B.

Characteristic: See table I.

Marking: Fuses shall be marked with the manufacturer's name or trademark, type designation, and current rating only.

TABLE I. Type designation identification.

Type designation				Terminal finish	Short circuit interrupt rating (amperes)			Overload interrupt time (seconds) <sup>2/</sup>	
Style	Charac- teristic	Maximum voltage	Current rating (amps)		Circuit voltage <sup>1/</sup>			200 percent nominal rating	300 percent nominal rating
					28 volts		125 volts		
					AC	DC	AC		
FM01	A	125V	1/200A	Tin plate	3,000	3,000	60	.003 - .0004	.0005 - .0001
FM01	A	125V	1/100A					.005 - .0008	.0005 - .0001
FM01	A	125V	1/64A					.001 - .0005	.0005 - .0001
FM01	A	125V	1/32A					.006 - .001	.001 - .0003
FM01	A	125V	1/16A					.050 - .010	.010 - .003
FM01	A	125V	1/10A					.040 - .010	.010 - .004
FM01	A	125V	1/8A					.050 - .010	.012 - .004
FM01	A	125V	2/10A					.055 - .014	.012 - .005
FM01	A	125V	1/4A					.040 - .014	.012 - .005
FM01	A	125V	3/10A					.037 - .013	.012 - .005
FM01	A	125V	4/10A		.042 - .015	.014 - .005			
FM01	A	125V	1/2A		.035 - .015	.015 - .005			
FM01	A	125V	6/10A		1,500	1,500	.090 - .020	.018 - .008	
FM01	A	125V	3/4A				.090 - .020	.018 - .008	
FM01	A	125V	1A				.050 - .018	.018 - .008	
FM01	A	125V	1-1/2A				.050 - .020	.020 - .008	
FM01	A	125V	2A				.060 - .020	.020 - .010	
FM01	A	125V	3A				.110 - .025	.023 - .010	
FM01	A	125V	4A				.300 - .040	.033 - .015	
FM01	A	125V	5A				.300 - .040	.033 - .015	

<sup>1/</sup> Alternating current - 60 Hz.

<sup>2/</sup> The time ranges, as shown, cover the temperature range from -55 ° C through +85 ° C.

Qualification and group C inspection:

Inspection routine. The number of group II samples for qualification and subgroup 2 samples for group C inspection shall be as shown in table II.

TABLE II. Group II and subgroup 2 samples.

Inspection	Number of sample fuses
Group II and subgroup 2	16
Terminal strength	4
Overload interrupt	
200 percent at -55°C	4
200 percent at +85°C	4
300 percent at -55°C	4
300 percent at +85°C	4
Insulation resistance	16

The number of group III samples for qualification ( or first article ) and subgroup 1 for group C testing shall consist of the number of sample units shown in table III. Short circuit interrupt tests shall be conducted at the voltage indicated, and the fuses shall be capable of withstanding a minimum short circuit current as shown in table III. Insulation resistance test shall be specified in MIL-PRF-23419.

TABLE III. Sampling for short circuit qualification and group C tests.

Current rating (amps)	Short circuit current (amps)			Number of sample units
	28 Volts		125 Volts	
	AC	DC	AC	
1/200	3000		60	12
1/10	3000			12
1/8	1500			12
5	1500		60	12

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Supersession and cross reference: The superseding items include the requirements of the superseded items. The existing stocks of superseded items may be used. When exhausted, the superseding items shall be used ( see table IV ).

TABLE IV. Cross-reference.

Superseding number	Superseded numbers	
	FSCM 81349	FSCM 81349
FM01A125V1/200A	FM01-125V 1/200A	M23419/1-001
FM01A125V1/100A	FM01-125V 1/100A	M23419/1-002
FM01A125V1/64A	FM01-125V 1/64A	M23419/1-003
FM01A125V1/32A	FM01-125V 1/32A	M23419/1-004
FM01A125V1/16A	FM01-125V 1/16A	M23419/1-005
FM01A125V1/10A	FM01-125V 1/10A	M23419/1-006
FM01A125V1/8A	FM01-125V 1/8A	M23419/1-007
FM01A125V2/10A	FM01-125V 2/10A	M23419/1-008
FM01A125V1/4A	FM01-125V 1/4A	M23419/1-009
FM01A125V3/10A	FM01-125V 3/10A	M23419/1-010
FM01A125V4/10A	FM01-125V 4/10A	M23419/1-011
FM01A125V1/2A	FM01-125V 1/2A	M23419/1-012
FM01A125V6/10A	FM01-125V 6/10A	M23419/1-013
FM01A125V3/4A	FM01-125V 3/4A	M23419/1-014
FM01A125V1A	FM01-125V 1A	M23419/1-015
FM01A125V1-1/2A	FM01-125V 1-1/2A	M23419/1-016
FM01A125V2A	FM01-125V 2A	M23419/1-017
FM01A125V3A	FM01-125V 3A	M23419/1-018
FM01A125V4A	FM01-125V 4A	M23419/1-019
FM01A125V5A	FM01-125V 5A	M23419/1-020

Custodians:

Army - CR  
 Navy - EC  
 Air Force - 85

Preparing activity:  
 DLA - CC

(Project: 5920-0561)

Review activities:

Army; - AR, CR4, MI  
 Navy - AS, MC, OS  
 Air Force: - 19, 99  
 NSA - NS