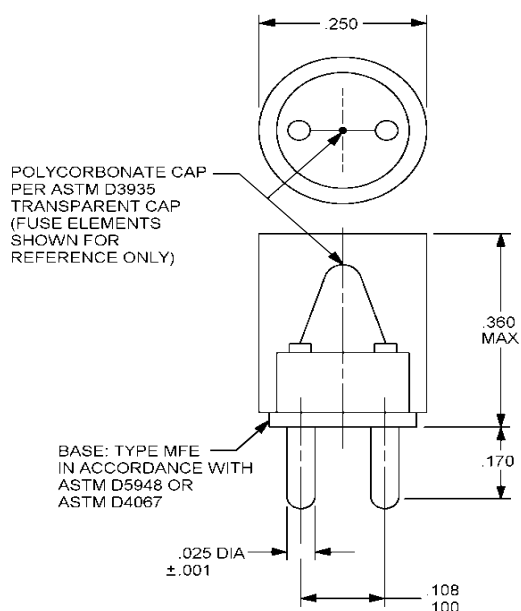


PERFORMANCE SPECIFICATION SHEET

FUSES, CARTRIDGE, INSTRUMENT TYPE, STYLE FM02 (INDICATING)

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-23419](#).



<u>Inches</u>	<u>mm</u>	<u>Inches</u>	<u>mm</u>	<u>Inches</u>	<u>mm</u>
.001	0.025	.108	2.743	.360	9.144
.025	0.635	.170	4.318		
.100	2.540	.250	6.350		

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerance is $\pm .010$ (0.25 mm).

FIGURE 1. Style FM02 fuses.



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REQUIREMENTS:

Interface and physical dimensions: See figure 1.

Applicable fuseholders: [MIL-PRF-19207/26](#), type FHN42W
[MIL-PRF-19207/28](#), type FHL44G
[MIL-PRF-19207/29](#), type FHL45G.

Terminals:

Material: Copper.

Finish: Bright alloy or tin plate.

Strength: 5 pounds force along terminal axis; 5 pounds force perpendicular to terminal axis at base.

Electrical:

Current rating, nominal: See table I.

Voltage rating, maximum: 125 volts.

Current carrying capacity: 100 percent at +25°C; 110 percent at -55°C; 90 percent at +85°C. The temperature of the case, body, or terminal shall, at no point, rise more than +70°C above the ambient air temperature.

Resistance: Not applicable.

Overload interrupt: Percentage of nominal rating, interrupt time -55°C through +85°C, 200 percent in 0 to 10 seconds; 300 percent in 0 to 0.1 second.

Short circuit interrupt: See table I.

Shock: Method I, except PIN designation FM02A125V1/500A shall be tested in accordance with [MIL-STD-202-213](#), test condition A.

Thermal shock: [MIL-STD-202-107](#), test condition A.

Characteristic: See table I.

Part or Identifying Number (PIN): The PIN is derived from table I and shall be as shown in table IV.

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

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TABLE I. PIN designation identification.

PIN designation				Short circuit interrupt rating (amperes ac) <u>1/</u>
Style	Characteristic	Maximum Voltage (volts)	Current rating (amperes)	
FM02	A	125V	1/500 A	10,000
			1/200 A	10,000
			1/100 A	10,000
			1/64 A	10,000
			1/32 A	10,000
			1/16 A	10,000
			1/10 A	10,000
			1/8 A	10,000
			2/10 A	10,000
			1/4 A	10,000
			3/10 A	10,000
			4/10 A	10,000
			1/2 A	10,000
			6/10 A	10,000
			3/4 A	10,000
			1 A	10,000
			1-1/2 A	10,000
			2 A	10,000
			3 A	300
			4 A	300
			5 A	300

1/ AC short circuit test current may be applied at a random point on the voltage sine wave.

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

The number of group III samples for qualification, and subgroup 1 for group C inspection, shall consist of four fuses of each of the styles shown in table III. Short circuit interrupt tests shall be conducted at the alternating current voltage indicated, and the fuses shall be capable of withstanding a minimum short circuit current as shown in table III.

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TABLE III. Short circuit tests.

Fuse style	Current rating	Short circuit current	AC type voltage
FM02	2 A	10,000 A	125 V
	5 A	300 A	

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 PIN	Superseded numbers				
FSCM 81349	FSCM 81349	FSCM 81349	FSCM 81349	FSCM 81349	FSCM 81349
FM02A125V1/500A	FM02-125V 1/500A	FM02-1/500A	FM02125V1/500A	FM021/500A	M23419/2-001
FM02A125V1/200A	FM02-125V 1/200A	FM02-1/200A	FM02125V1/200A	FM021/200A	M23419/2-002
FM02A125V1/100A	FM02-125V 1/100A	FM02-1/100A	FM02125V1/100A	FM021/100A	M23419/2-003
FM02A125V1/64A	FM02-125V 1/64A	FM02-1/64A	FM02125V1/64A	FM021/64A	M23419/2-004
FM02A125V1/32A	FM02-125V 1/32A	FM02-1/32A	FM02125V1/32A	FM021/32A	M23419/2-005
FM02A125V1/16A	FM02-125V 1/16A	FM02-1/16A	FM02125V1/16A	FM021/16A	M23419/2-006
FM02A125V1/10A	FM02-125V 1/10A	FM02-1/10A	FM02125V1/10A	FM021/10A	M23419/2-007
FM02A125V1/8A	FM02-125V 1/8A	FM02-1/8A	FM02125V1/8A	FM021/8A	M23419/2-008
FM02A125V2/10A	FM02-125V 2/10A	FM02-2/10A	FM02125V2/10A	FM022/10A	M23419/2-009
FM02A125V1/4A	FM02-125V 1/4A	FM02-1/4A	FM02125V1/4A	FM021/4A	M23419/2-010
FM02A125V3/10A	FM02-125V 3/10A	FM02- 3/10A	FM02125V3/10A	FM02 3/10A	M23419/2-011
FM02A125V4/10A	FM02-125V 4/10A	FM02-4/10A	FM02125V4/10A	FM024/10A	M23419/2-012
FM02A125V1/2A	FM02-125V 1/2A	FM02-1/2A	FM02125V1/2A	FM021/2A	M23419/2-013
FM02A125V6/10A	FM02-125V 6/10A	FM02-6/10A	FM02125V6/10A	FM026/10A	M23419/2-014
FM02A125V3/4A	FM02-125V 3/4A	FM02-3/4A	FM02125V3/4A	FM023/4A	M23419/2-015
FM02A125V1A	FM02-125V 1A	FM02-1A	FM02125V1A	FM021A	M23419/2-016
FM02A125V1-1/2A	FM02-125V 1-1/2A	FM02-1-1/2A	FM02125V1-1/2A	FM021-1/2A	M23419/2-017
FM02A125V2A	FM02-125V 2A	FM02-2A	FM02125V2A	FM022A	M23419/2-018
FM02A125V3A	FM02-125V 3A	FM02-3A	FM02125V3A	FM023A	M23419/2-019
FM02A125V4A	FM02-125V 4A	FM02-4A	FM02125V4A	FM024A	M23419/2-020
FM02A125V5A	FM02-125V 5A	FM02-5A	FM02125V5A	FM025A	M23419/2-021

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Referenced documents. In addition to [MIL-PRF-23419](#), this document references the following:

[ASTM D3935](#)
[ASTM D4067](#)
[ASTN D5948](#)

[MIL-STD-202-107](#)
[MIL-STD-202-213](#)
[MIL-PRF-19207/26](#)
[MIL-PRF-19207/28](#)
[MIL-PRF-19207/29](#)

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Custodians:
Army - CR
NAVY - EC
Air Force - 85
DLA - CC

Preparing activity:
DLA - CC

(Project 5920-2017-020)

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

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