

MILITARY SPECIFICATION SHEET

CONNECTOR, RECEPTACLE, ELECTRICAL, CLASS I
(COAXIAL, SERIES TWIN), TYPE UG-423B/U

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

The complete requirements for procuring the connector described herein shall consist of this document and the latest issue of Specification MIL-C-3655.

INACTIVE FOR NEW DESIGN

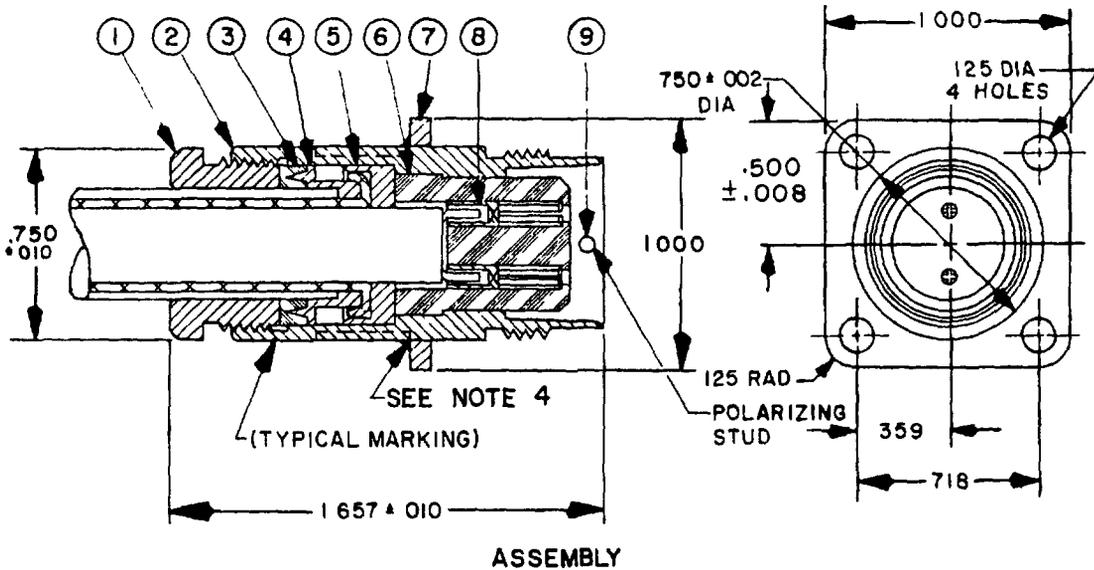


FIGURE 1. Type UG-423B/U electrical receptacle connector.

ⓑ denotes changes

MIL-C-3655/3B

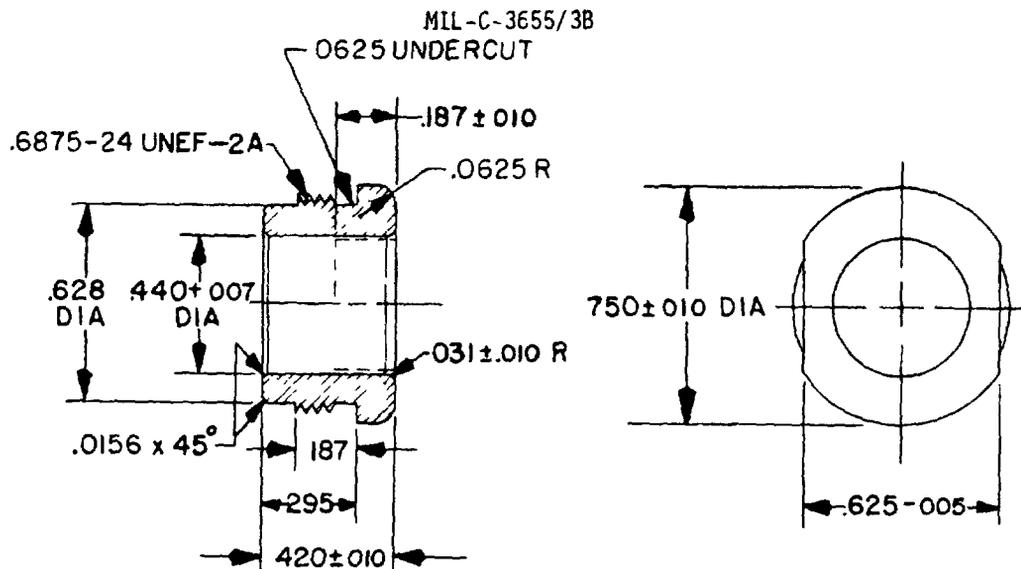
Item	Description	Material	Quantity
1	Nut	Brass	1
2	Body	Brass	1
3	Gasket	Silicone rubber	1
4	Clamp	Brass	1
5	Sleeve	Brass	1
6	Insulator	Plastic	1
7	Mounting plate	Brass	1
8	Center contact	Copper beryllium	2
9	Pin	Copper beryllium	2

INCHES	MM	INCHES	MM	INCHES	MM	INCHES	MM	INCHES	MM
.001	.03	.032	.81	.180	4.57	.438	11.13	.620	15.75
.002	.05	.040	1.02	.187	4.75	.440	11.18	.625	15.88
.003	.08	.055	1.40	.218	5.54	.465	11.81	.628	15.95
.004	.10	.059	1.50	.229	5.82	.470	11.94	.635	16.13
.005	.13	.061	1.55	.250	6.35	.475	12.06	.636	16.15
.006	.15	.062	1.57	.267	6.78	.495	12.57	.644	16.36
.007	.18	.0625	1.588	.295	7.49	.500	12.70	.648	16.46
.008	.20	.070	1.78	.298	7.55	.533	13.54	.671	17.04
.010	.25	.080	2.03	.324	8.23	.535	13.59	.682	17.32
.012	.30	.090	2.29	.359	9.12	.560	14.22	.687	17.45
.015	.38	.092	2.34	.360	9.14	.565	14.35	.6875	17.462
.0156	.396	.093	2.36	.375	9.52	.573	14.55	.718	18.24
.018	.46	.095	2.41	.388	9.86	.575	14.60	.750	19.05
.020	.51	.100	2.54	.420	10.67	.590	14.99	1.000	25.40
.031	.79	.125	3.18	.437	11.10	.600	15.24	1.470	37.34

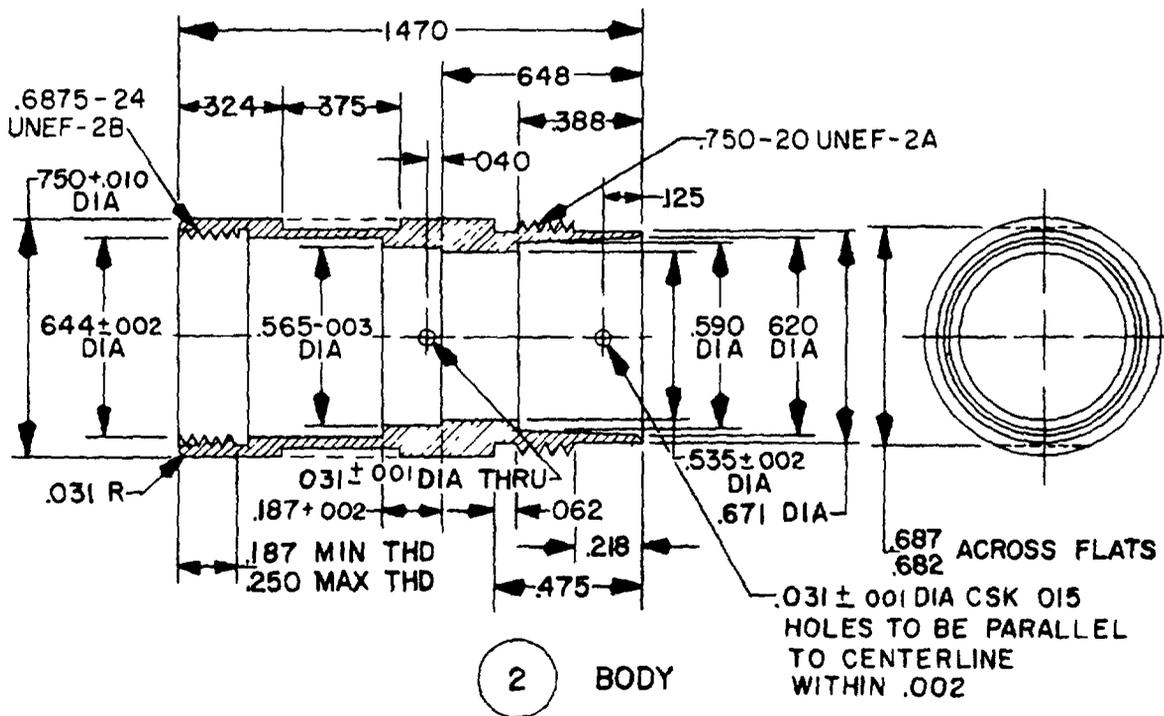
NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only and are based upon 1.00 inch = 25.4 mm.
3. Unless otherwise specified, tolerance is ± 0.005 (.13 mm)
4. Silver solder all around.

FIGURE 1. Type UG-423B/U electrical receptacle connector - Continued.

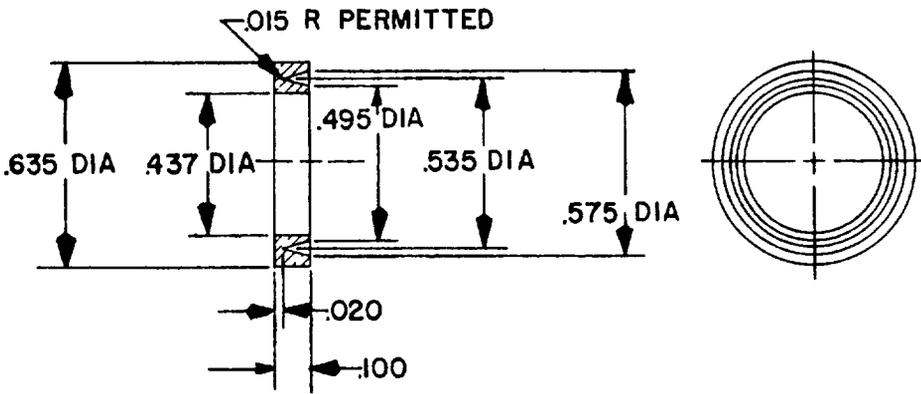


1 NUT

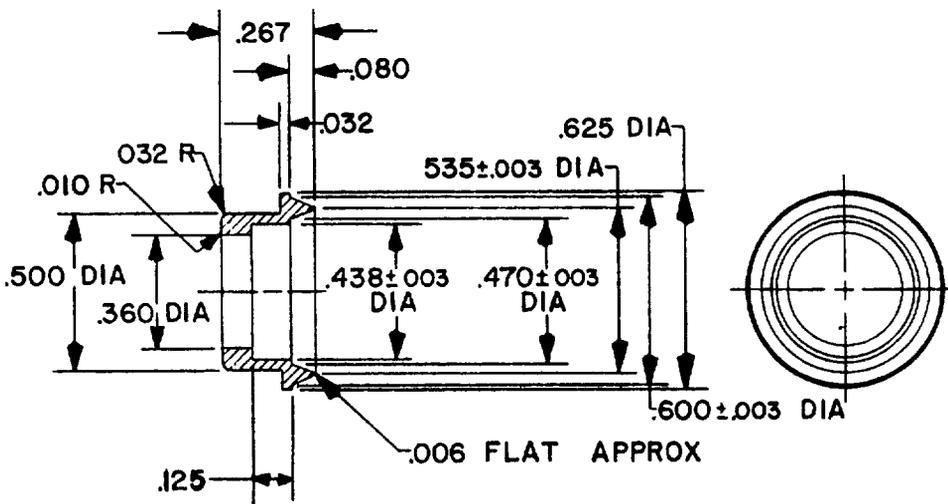


2 BODY

FIGURE 1. Type UG-423B/U electrical receptacle connector - Continued.



3 GASKET



4 CLAMP

FIGURE 1. Type UG-423B/U electrical receptacle connector - Continued

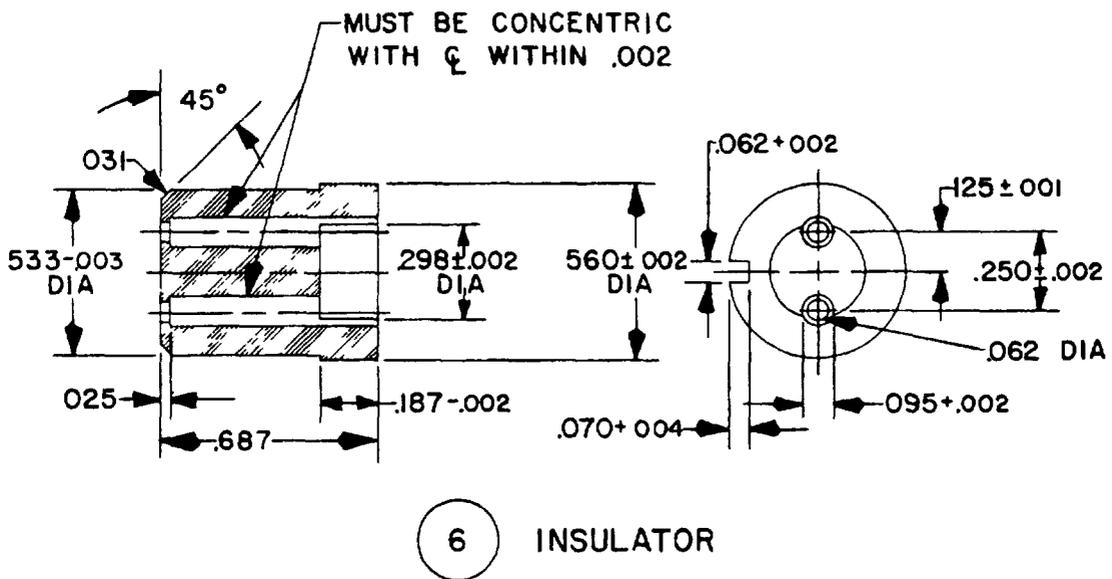
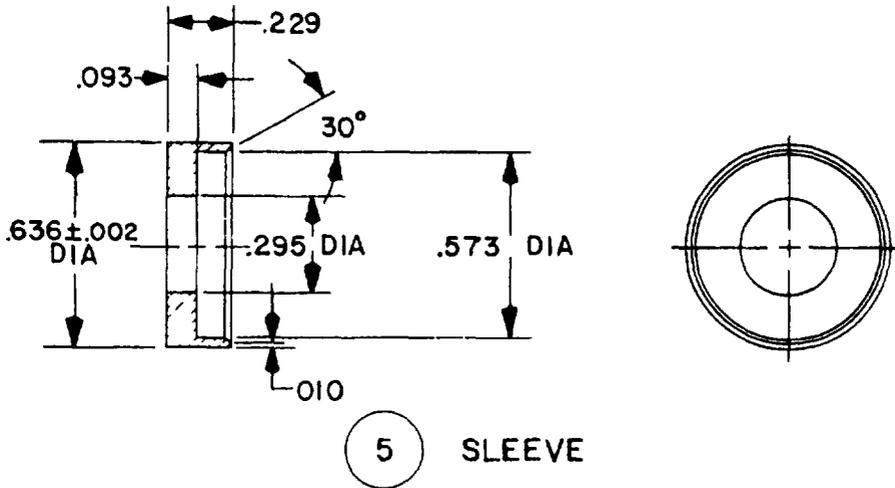
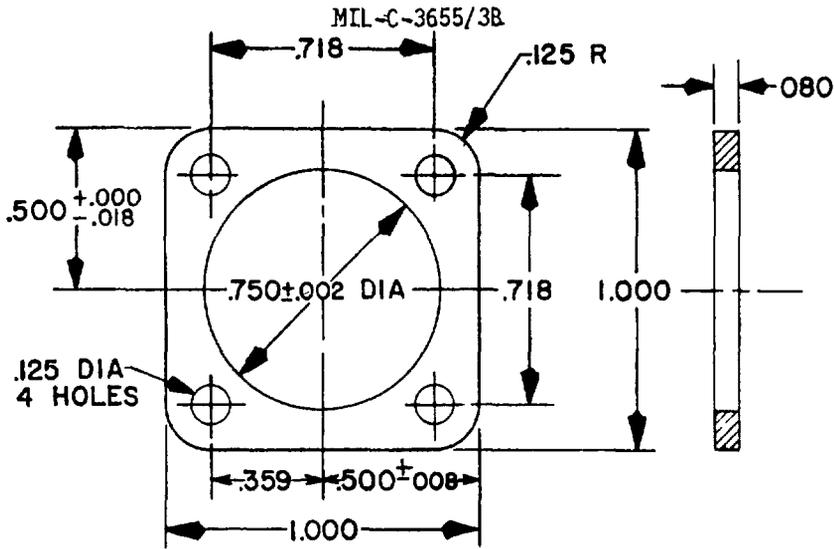
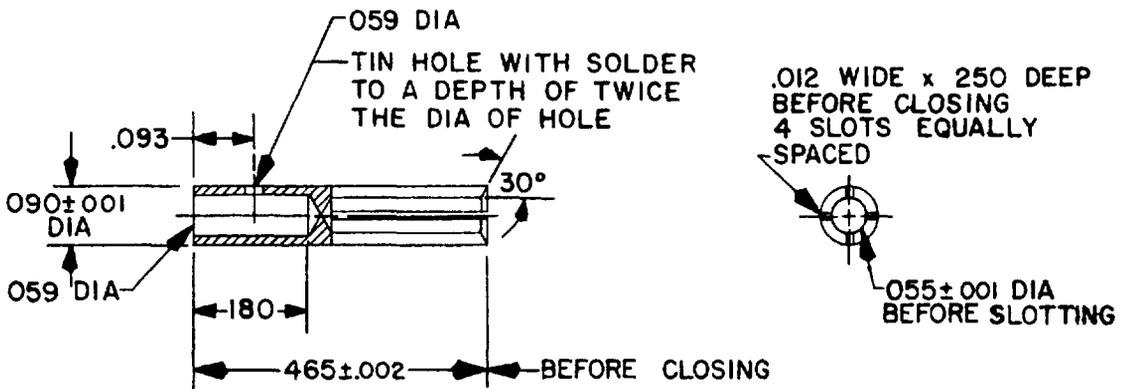


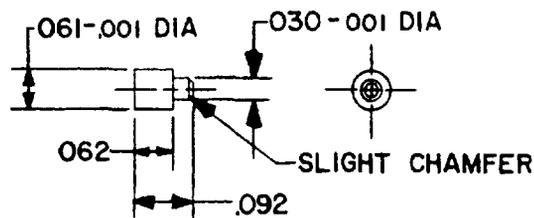
FIGURE 1. Type UG-423B/U electrical receptacle connector - Continued



7 MOUNTING PLATE

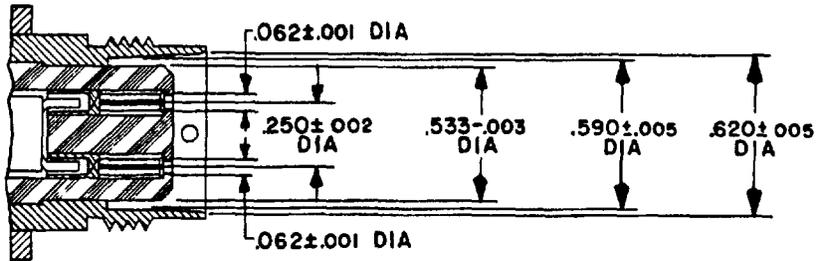


8 CENTER CONTACT



9 PIN

FIGURE 1. Type UG-423B/U electrical receptacle connector - Continued



INCHES	MM	INCHES	MM
.001	.03	.250	6.35
.002	.05	.533	13.54
.003	.08	.590	14.99
.005	.13	.620	15.75
.062	1.57		

NOTES

1. Dimensions are in inches.
2. Metric equivalents are given for general information only and are based upon 1.00 inch = 25.4 mm.

FIGURE 2 Visual mating requirements

MIL-C-3655/3B

ⓑ ENGINEERING DATA:

Nominal impedance: 95 ohms.

Frequency range DC to 500 MHz, maximum.

Voltage rating. 500 volts peak at sea level.

Mating connector: M3655/1-0421.

Intended use: Type M3655/3-0423 electrical connector is designed for use with radio-frequency cable M17/15-RG22.

ⓑ REQUIREMENTS:

Design and construction. See figures 1 and 2.

Metal parts: All metal parts shall have silver plating of not less than 0.0002 inch thickness and of sufficient smoothness and density to withstand the salt spray (corrosion) test. Silver plating shall be in accordance with QQ-S-365.

Force to engage/disengage:

Torque: Not applicable.

Longitudinal force: Not applicable.

Coupling proof torque Not applicable.

Mating characteristics (see figures 1 and 2 for dimensions)

Center contact.

Oversize test pin: 0.062 inch diameter, minimum (nonclosed entry contact only).

Test pin finish: 16 microinches.

Insertion depth: .093 inch, minimum.

Number of insertions: One.

Insertion force test

Steel test pin diameter. 0.062 inch, minimum.

Test pin finish: 16 microinches.

Insertion depth .125 inch, minimum.

Insertion force 2 pounds, maximum.

Withdrawal force test.

Steel test pin diameter .052 inch, maximum.

Test pin finish. 16 microinches.

Insertion depth: .125 inch, minimum

Withdrawal force 2 ounces, minimum.

Permeability Applicable.

Hermetic seal Not applicable.

Leakage. Not applicable.

Insulation resistance: 5 x 10⁹ ohms, minimum.

Contact insulator captivation: Not applicable.

Salt spray (corrosion). Applicable.

Connector durability: Applicable.

Contact resistance (milliohms, maximum)

	<u>Initial</u>	<u>After environment</u>
Inner conductor contacts:	2.67	3.50
Outer conductor contacts	.38	Not applicable
Braid to body:	.20	Not applicable

Dielectric withstanding voltage 1,500 Vrms, minimum, at sea level.

Vibration, high frequency Applicable.

Shock (specified pulse) Not applicable.

Temperature cycling Applicable.

Humidity. Applicable, but no measurement shall be made at high humidity.
Insulation resistance shall be at least 2×10^8 ohms within 5 minutes
after removal from the humidity chamber.

Cable retention force. 75 pounds, minimum.

Coupling nut retention Not applicable.

Marking. In accordance with MIL-C-3655.
Part number M3655/3-0423.

Qualification Not required.

Custodians:

Army - CR
Navy - EC
Air Force - 85

Preparing activity

Army - CR

Agent

DLA - ES

(Project 5935-3086-3)

Review activities

Army - MI
Navy - OS
Air Force - 11, 17, 99
DLA - ES

User activities

Army - AT
Navy - AS, MC, SH
Air Force - 19

STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL

INSTRUCTIONS This form is provided to solicit beneficial comments which may improve this document and enhance its use. DoD contractors, government activities, manufacturers, vendors, or other prospective users of the document are invited to submit comments to the government. Fold on lines on reverse side, staple in corner, and send to preparing activity. Attach any pertinent data which may be of use in improving this document. If there are additional papers, attach to form and place both in an envelope addressed to preparing activity. A response will be provided to the submitter, when name and address is provided, within 30 days indicating that the 1426 was received and when any appropriate action on it will be completed.

NOTE This form shall not be used to submit requests for waivers, deviations or clarification of specification requirements on current contracts. Comments submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or to amend contractual requirements.

DOCUMENT IDENTIFIER (Number) AND TITLE

MIL-C-3655/3B

NAME OF ORGANIZATION AND ADDRESS OF SUBMITTER

HQ USA CORADCOM
ATTN DRDCO-CM-DM
Fort Monmouth, NJ 07703

VENDOR USER MANUFACTURER

1 HAS ANY PART OF THE DOCUMENT CREATED PROBLEMS OR REQUIRED INTERPRETATION IN PROCUREMENT USE? IS ANY PART OF IT TOO RIGID RESTRICTIVE, LOOSE OR AMBIGUOUS? PLEASE EXPLAIN BELOW

A GIVE PARAGRAPH NUMBER AND WORDING

B RECOMMENDED WORDING CHANGE

C REASON FOR RECOMMENDED CHANGE(S)

2 REMARKS

SUBMITTED BY (Printed or typed name and address - Optional)

TELEPHONE NO

DATE

FOLD

HQ, USA CORADCOM
ATTN. DRDCO-CM-DM
Fort Monmouth, NJ 07703

POSTAGE AND FEES PAID



OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE \$300

HQ, USA CORADCOM
ATTN DRDCO-CM-DM
Fort Monmouth, NJ 07703

FOLD