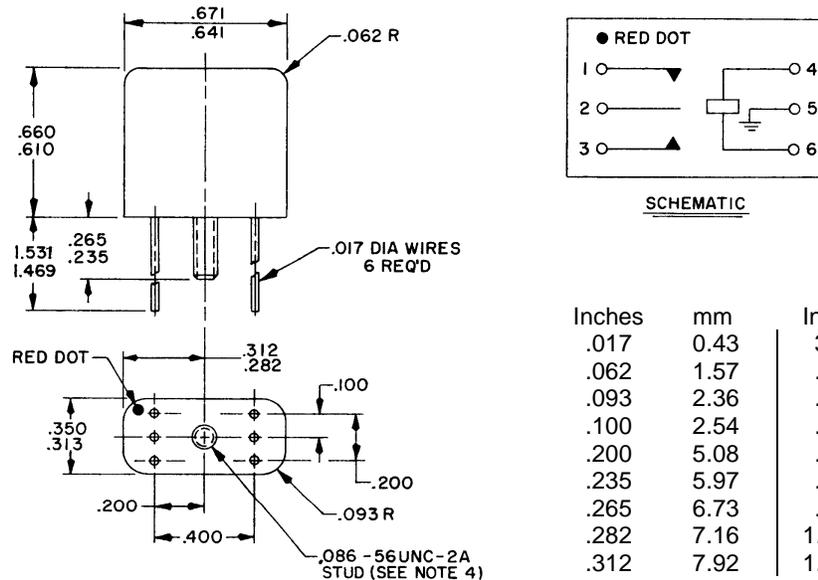


DETAIL SPECIFICATION SHEET

CHOPPERS, ELECTROMECHANICAL,
 SINGLE POLE, DOUBLE THROW,
 BREAK BEFORE MAKE

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 the latest issue of MIL-DTL-83729.



NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerance is ± 0.005 (.13mm).
4. Hardware supplied:
 1 - .086 Flat washer
 1 - .086 Lock washer
 1 - .086 - 56UNC - 2B Hex nut
5. When the coil is de-energized the center reed may be in any of 3 positions.

FIGURE 1. Outline drawing, terminal arrangement and schematic diagram.

REQUIREMENTS:

Contact data:

Single pole, double throw, break before make.

Polarity: With positive voltage on lead 6 and negative on lead 4, contacts 2 and 3 close.

Voltage and current: 2 milliamperes resistive maximum at 10 volts, 5,000 ohms resistance.

Resistance: Shall not exceed 10 ohms.

Contact bounce: Shall not exceed 15° during the initial or final 25° of dwell or maximum of 30° for any dwell period.

Coil data at 25°C.

Voltage rated: See table I.

Resistance, dc: See table I.

Impedance: See table I.

Frequency range: See table I.

Waveform characteristics (6.3 volts, at 25°C):

Dwell time: See table I.

Dissymmetry: 30° maximum.

Transfer time: See table I.

Phase angle: See table I.

Noise level: Shall not exceed 30 μ V rms.

Environmental conditions:

Temperature range: -65°C to +100°C.

Seal: Seal test I.

Dielectric withstanding voltage: See table I.

Insulation resistance: Shall be 100 megohms minimum at 100 V dc.

Vibration: Vibration I, method 201, MIL-STD-202, contact derangement 15° maximum.

Moisture resistance: At the completion of the sixth step, insulation resistance shall be 100 ohms minimum.

Shock: Method 213, MIL-STD-202, test condition I (100g's).

Dielectric withstanding voltage: Not applicable.

Life:

Duration of test: 1,000 hours at nominal coil voltage and frequency with zero voltage on the contacts at 25°C.

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Mechanical:

Weight: .021 pounds maximum, without hardware.

Dimensions: See figure 1.

Dissimilar metals: Not applicable.

Enclosure: Sealed.

Terminals: Wire leads.

Mounting position: Any.

Part number: M83729/1- (dash number from table I).

TABLE I. Dash number and characteristics.

Dash number	Coil Voltage rated	Resistance dc	Impedance	Frequency range	Dwell time	Transfer time	Phase angle	Dielectric Withstanding voltage
001	6.3 volts, 400 Hz at 25°C only	85 ohms ±10%	115 ohms ±20%	0 to 1,000 Hz	140° to 185°	2.5° min 400 Hz at 25°C	65° ±15°	145 Vrms, 400 Hz or 200 Vdc for 60 seconds
002	6.3 volts, 60 Hz at 25°C only	310 ohms ±10%	330 ohms ±20%	0 to 250 Hz	155° to 185°	2.5° min 60 Hz at 25°C	25° ±10°	145 Vrms, 60 Hz or 200 Vdc for 60 seconds

Custodians:

Army - CR
 Navy - EC
 Air Force - 11
 DLA - CC

Preparing activity:

DLA - CC

(Project 5945-1152-01)

Review activities:

Army - AT, AV, CR4, MI
 Navy - AS, MC, OS
 Air Force - 19