C. ELECTRICAL REQUIREMENTS:

(1) COIL CURRENT: MUST OPERATE (EITHER DIRECTION) IN ACCORDANCE WITH TABLE I.

(2) COIL RESISTANCE: IN ACCORDANCE WITH TABLE I.

(3) CONTACT RESISTANCE: MUST OPERATE CURRENT (EITHER DIRECTION) IN ACCORDANCE WITH TABLE I.

(4) CONTACT RESISTANCE: SHALL BE 1.0 OHM MAXIMUM WHEN MEASURED WITH 100 MILLIAMPERES FROM A 6 VOLT OPEN CIRCUIT VOLTAGE (CONTACTS SHALL NOT SWITCH THE MEASURING LOAD). 100 PERCENT OF UNITS PRODUCED SHALL BE INSPECTED FOR THIS CHARACTERISTIC.

(5) DIELECTRIC STRENGTH: 1000 VOLTS RMS MINIMUM FOR 5 SECONDS MINIMUM WITHOUT DAMAGE, ARcing OR BURNING BETWEEN EACH SWITCHING CIRCUIT AND OTHER CIRCUITS. 500 VOLTS RMS MINIMUM FOR 5 SECONDS MINIMUM BETWEEN OPEN CONTACTS AND BETWEEN COILS AND BETWEEN COILS AND FRAME.

(6) INSULATION RESISTANCE: 1,000 MEGOhms MINIMUM AT 50 VOLTS DC BETWEEN MUTUALLY INSULATED TERMINALS. OPEN SWITCHING CONTACTS ENERGIZED OR NOT. COIL AND FRAME AT PLUS 25 DEGREES CENTIGRADE (1000 MEGOhms AT 125 DEGREES CENTIGRADE). CONTACTS AND FRAME.

(7) TRANSFER TIME: EACH 3 MILLISECONDS MAXIMUM

(8) CONTACT BOUNCE: EACH 2.0 MILLISECONDS MAXIMUM

3. DESIGN:

A. ELECTRICAL RATINGS:

(1) COIL VOLTAGE (SUGGESTED SOURCE): IN ACCORDANCE WITH TABLE I.

(2) COIL CURRENT (MINIMUM CONTINUOUS): IN ACCORDANCE WITH TABLE I.

(3) MAXIMUM COIL POWER: 0.60 WATTS MAXIMUM PER COIL AT PLUS 25 DEGREES CENTIGRADE DERATED TO 0.25 WATTS PER COIL AT PLUS 125 DEGREES CENTIGRADE.

(4) CONTACT RATING (PER POLE): 0.5 AMPERES AT 32 WOLTS DC (RESISTIVE LOAD) OR 2 AMPERES AT 115 VOLTS RMS, 60 OR 400 CPS, (RESISTIVE LOAD, CASE NOT GROUNDED) OR 0.25 AMPERES (CASE GROUNDED).

B. CONSTRUCTION:

(1) CONTACT FORM AND SWITCHING ACTION: FORM C CONTACTS (BREAK BEFORE MAKE); DOUBLE POLE, DOUBLE THROW, POLARIZED WITH MAGNETIC LATCHING ACTION.

(2) CONTACT MATERIAL: APPLICABLE FOR RATED LOAD.

(3) LEAD MATERIAL: LEAD MATERIAL SHALL BE IRON-NICKEL-COBALT ALLOY (ADVISORY) IN ACCORDANCE WITH MIL-STD-1276, TYPE B.

C. QUALIFICATION REQUIREMENTS:

(1) LIFE: LIFE OF THIS UNIT SHALL BE 100,000 CYCLES MINIMUM WHEN TESTED PER MIL-STD-1020A FOR THE LIFE TESTS, THE CLASSIFICATION OF THIS RELAY MAY BE GENERAL PURPOSE OR LOW-LEVEL WITH THE STIPULATION AS STATED UNDER CONTACT RATING.

D. ENVIRONMENTAL REQUIREMENTS:

(1) HUMIDITY (MOISTURE RESISTANCE): UNITS SHALL BE CAPABLE OF WITHSTANDING RELATIVE HUMIDITY UP TO 98 PERCENT.

(2) OPERATING TEMPERATURE RANGE: UNITS SHALL BE CAPABLE OF OPERATING WITHIN THE ELECTRICAL REQUIREMENTS OF THIS SPECIFICATION WHEN EXPOSED TO AMBIENT TEMPERATURES FROM MINUS 65 DEGREES CENTIGRADE TO PLUS 125 DEGREES CENTIGRADE.

(3) THERMAL SHOCK: UNITS SHALL BE CAPABLE OF WITHSTANDING THERMAL SHOCK FROM MINUS 65 DEGREES CENTIGRADE TO PLUS 125 DEGREES CENTIGRADE.

(4) THE SALT SPRAY TEST PER MIL-R-5757 IS NOT APPLICABLE.

4. SPECIAL CONDITIONING:

A. THE MANUFACTURER SHALL SUBMIT EACH RELAY TO THE MISS TEST AS FOLLOWS:

(1) LOAD SHALL BE 20 MICROAMPERES MAXIMUM (RESISTIVE) AT 20 MILLIVOLTS MAXIMUM OPEN CIRCUIT VOLTAGE.

(2) TEST SPEED SHALL BE 5 CYCLES, OR LESS, PER SECOND.

(3) EACH RELAY SHALL OPERATE FOR 5,000 CYCLES.

(4) EACH RELAY SHALL BE MONITORED FOR OPENS, SHORTS AND CONTACT RESISTANCE WHICH SHALL NOT EXCEED 1000 OHMS.

(5) OCCURRENCE OF ANY OF THESE EVENTS SHALL CONSTITUTE A MISS AND SHALL BE CAUSE FOR REJECTION OF RELAY.

(6) CERTIFICATION OF THESE MEASUREMENTS SHALL ACCOMPANY EACH SHIPMENT, ONE COPY OF A TABULATION, SHOWING THE NUMBER OF RELAYS SUBMITTED TO THE 5,000 CYCLE TEST, THE NUMBER OF RELAYS FAILING THE 5,000 CYCLE TEST AND THE TIME (OR CYCLE) OF FAILURE SHALL ACCOMPANY EACH SHIPMENT.

(7) TEST READINGS FOR REQUIREMENTS SPECIFIED IN NOTES 1, 3, 6, 7, 8 FOR EACH RELAY TAKEN BEFORE AND AFTER BURN-IN SHALL BE SUBMITTED WITH EACH LOT.

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**TABLE I**

<table>
<thead>
<tr>
<th>COIL PARAMETERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESISTANCE AT 25°C OMS ± 10%</td>
</tr>
<tr>
<td>NO.</td>
</tr>
<tr>
<td>1</td>
</tr>
</tbody>
</table>

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**NOTE:** UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON FRACTIONS DECIMALS ANGLES ARE +−

**SEE NOTES:** MATERIAL APPROVAL CODE IDENT NO. | SIZE | NASA DRAWING NO. |
| 1006282 |