
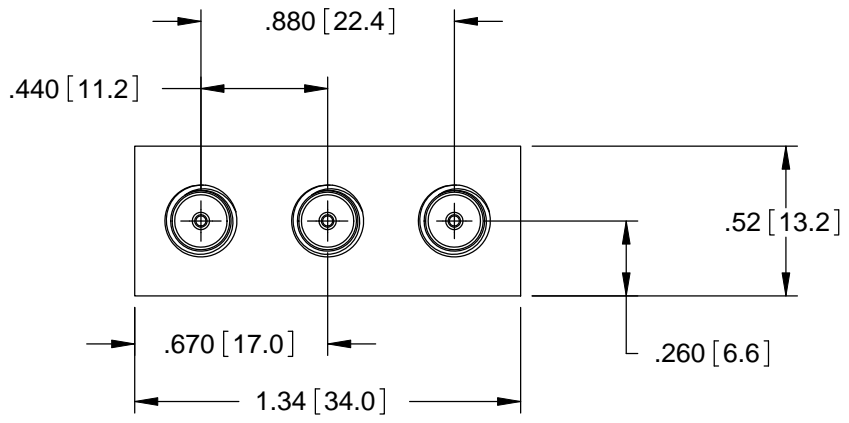
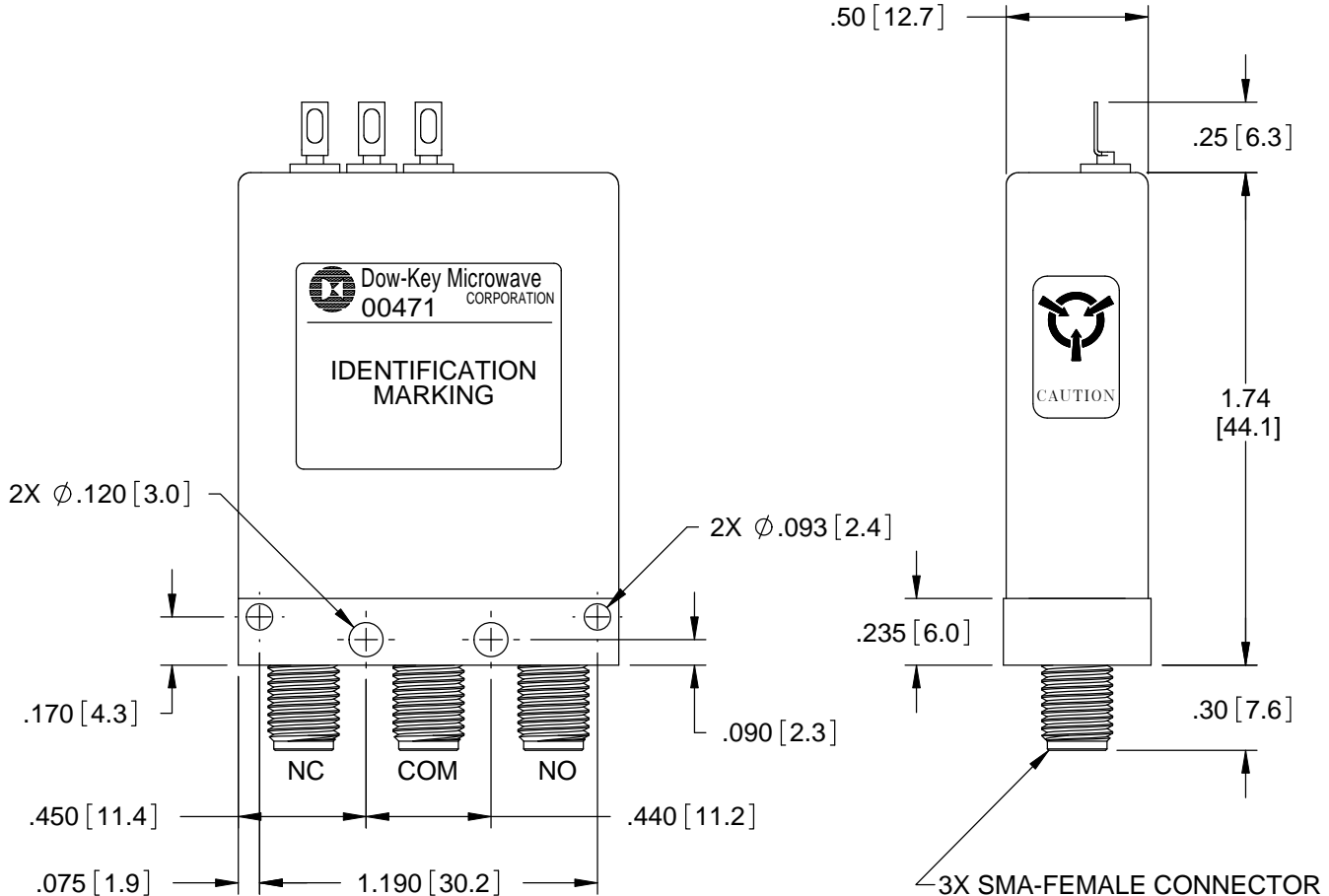
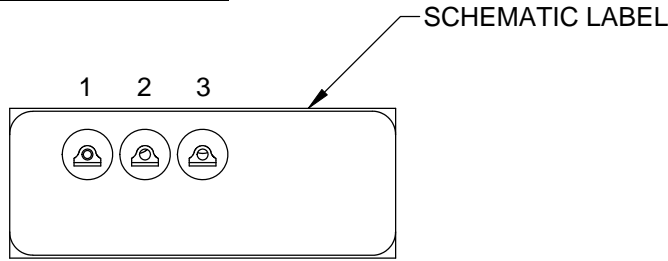


| REVISIONS |                                  |         |          |
|-----------|----------------------------------|---------|----------|
| REV.      | DESCRIPTION                      | DATE    | APPROVED |
| G         | REVISED AND REDRAWN PER ECO 9603 | 5/25/09 | K.R.     |
| H         | REVISED PER ECO 11255            | 6/25/15 | K.R.     |

| Nominal<br>Coil Voltage | Part Number |
|-------------------------|-------------|
| 12 Vdc                  | 401-220802A |
| 15 Vdc                  | 401-290802A |
| 24 Vdc                  | 401-280802A |
| 28 Vdc                  | 401-230802A |

|                            |   |      |           |                         |  |   |  |   |
|----------------------------|---|------|-----------|-------------------------|--|---|--|---|
| REVISIONS                  | H | H    | H         |                         |  |   |  <b>DowKey®<br/>Microwave</b><br>CORPORATION<br><small>A DOVER TECHNOLOGIES COMPANY</small> | 4822 McGrath Street<br>Ventura, CA. 93003-5641<br>PH: (805) 650-0260<br>FAX: (805) 650-1734 |
| SHEET NO.                  | 1 | 2    | 3         |                         |  |   |  |   |
| APPROVALS                  |   |      | DATE      |                         |  | <b>SWITCH, SPDT, FAILSAFE<br/>SMA-FEMALE CONNECTORS<br/>TTL CONTROL</b> |  |   |
| DRAWN<br>SARA LEE          |   |      | 5/14/2009 |                         |  |   |  |   |
| ENGINEERING<br>T. JOHNSON  |   |      | 6/23/2015 |                         |  |   |  |   |
| QUALITY<br>S. LYNCH        |   |      | 6/25/2015 |                         |  |   |  |   |
| MANUFACTURING<br>R. GARCIA |   |      | 6/26/2015 |                         |  |   |  |   |
| CODE IDENT. NO.            |   |      |           | DWG. NO.                |  |   |  |   |
| <b>00471</b>               |   |      |           | <b>401-2X0802A</b>      |  |   |  |   |
| SCALE                      |   | NONE |           | FINAL ASSY: 401-230802A |  |   | SHEET 1 OF 3   |   |

# OUTLINE DRAWING:



[ ] MILLIMETERS

|   |                                 |                                |                  |
|---|---------------------------------|--------------------------------|------------------|
| UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:<br>.XXX ±.010 ANGLES: ±3°<br>.XX ±.030 | CODE IDENT. NO.<br><b>00471</b> | DWG. NO.<br><b>401-2X0802A</b> | REV.<br><b>H</b> |
|   | SCALE NONE                      | FINAL ASSY: 401-230832A        | SHEET 2 OF 3     |

# SPECIFICATION:

## 1.0 RF CHARACTERISTICS:

|                             |         |        |        |        |         |
|-----------------------------|---------|--------|--------|--------|---------|
| 1.1 FREQUENCY (GHz)         | DC - 1  | 1 - 4  | 4 - 8  | 8 - 12 | 12 - 18 |
| 1.2 VSWR (RATIO MAX)        | 1.10:1  | 1.15:1 | 1.20:1 | 1.30:1 | 1.35:1  |
| 1.3 INSERTION LOSS (dB MAX) | 0.10    | 0.15   | 0.20   | 0.30   | 0.35    |
| 1.4 ISOLATION (dB MIN)      | 85      | 80     | 70     | 65     | 60      |
| 1.5 RF POWER (WATTS CW MAX) | 200     | 125    | 90     | 75     | 60      |
| 1.6 IMPEDANCE (NOMINAL)     | 50 OHMS |        |        |        |         |

## 2.0 ACTUATION DATA:

| 2.1 | NOMINAL VOLTAGE | OPERATING VOLTAGE | CURRENT (TYP)<br>@ NOMINAL VOLTAGE & 25°C |
|-----|-----------------|-------------------|---|
|     | 12              | 11-14             | 185mA                                     |
|     | 15              | 13-17             | 160mA                                     |
|     | 24              | 20-28             | 120mA                                     |
|     | 28              | 24-32             | 90mA                                      |

2.2 SWITCHING TIME 15mS MAX  
2.3 OPERATING MODE FAILSAFE

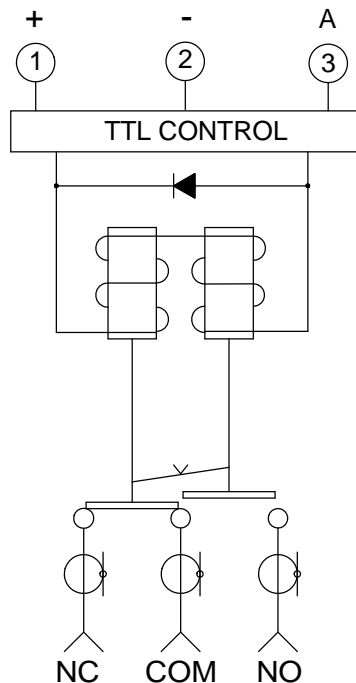
## 3.0 MECHANICAL:

3.1 CONTACT ARRANGEMENT SPDT  
3.2 RF CONTACTS BREAK BEFORE MAKE  
3.3 WEIGHT 1.4oz (40g) NOMINAL  
3.4 DESIGN LIFE 1,000,000 CYCLES MINIMUM

## 4.0 ENVIRONMENTAL:

4.1 OPERATING TEMPERATURE -25°C TO +65°C  
4.2 STORAGE TEMPERATURE -55°C TO +85°C  
4.3 SEAL: SAND AND DUST

# SCHEMATIC:



| RF PATH  | LOGIC INPUT 'A' |
|----------|-----------------|
| NC - COM | 0               |
| NO - COM | 1               |

LOGIC HI "1" = 2.4-5.5Vdc  
LOGIC LOW "0" = 0-0.8Vdc

|                                 |                                |                  |
|---------------------------------|--------------------------------|------------------|
| CODE IDENT. NO.<br><b>00471</b> | DWG. NO.<br><b>401-2X0802A</b> | REV.<br><b>H</b> |
| SCALE NONE                      | FINAL ASSY: 401-230802A        | SHEET 3 OF 3     |