
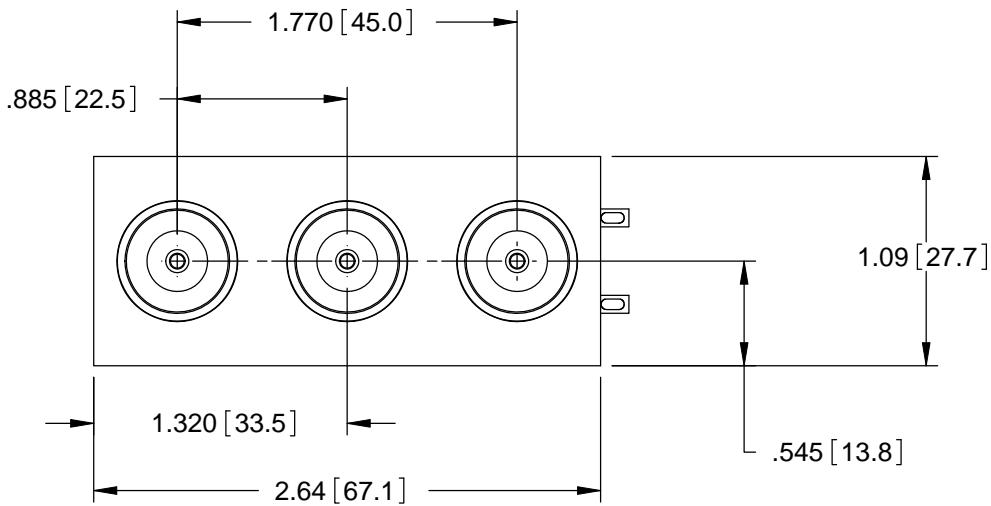
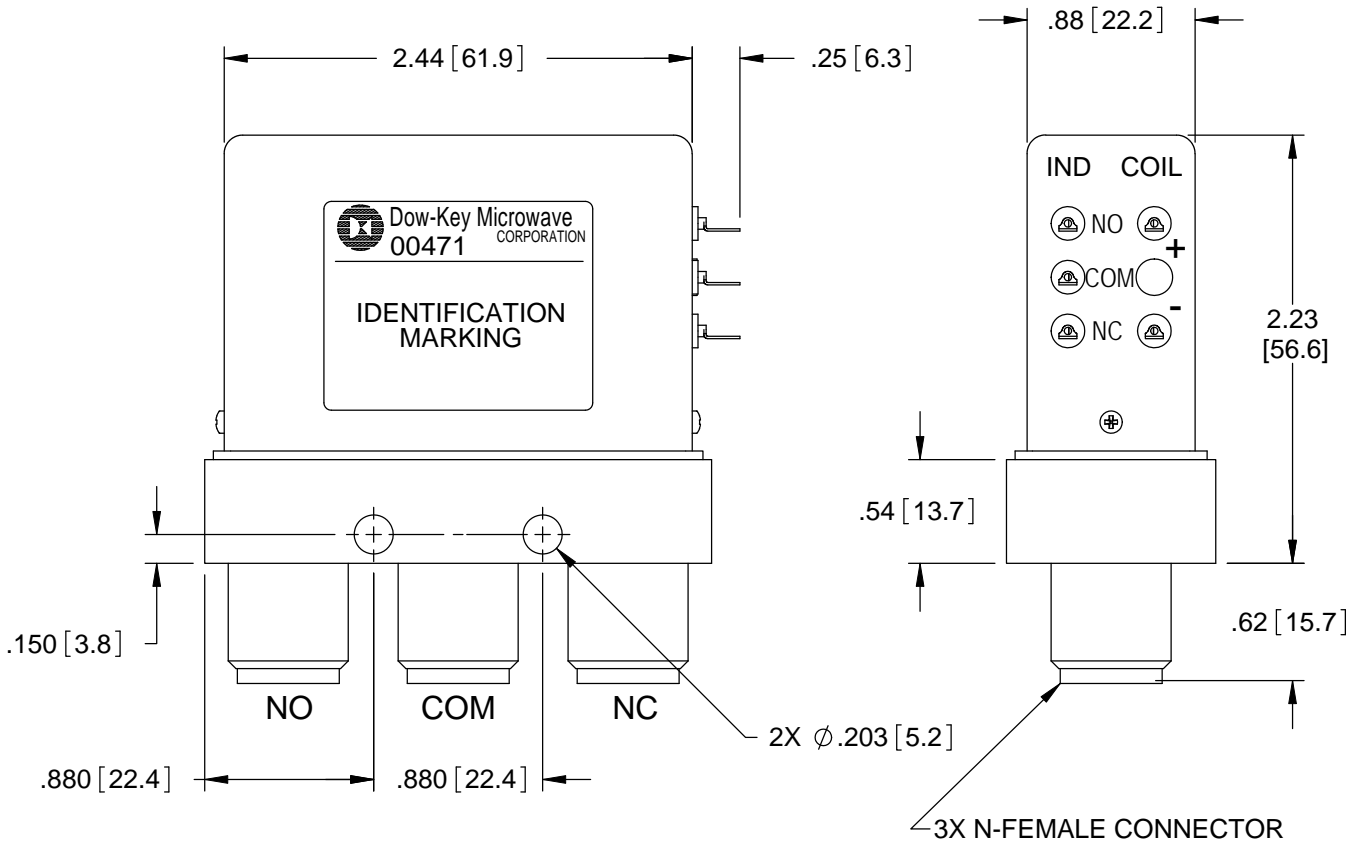
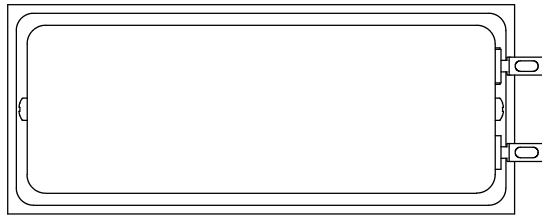


| REVISIONS |                       |         |          |
|-----------|-----------------------|---------|----------|
| REV.      | DESCRIPTION           | DATE    | APPROVED |
| N         | REVISED PER ECO 10672 | 3/05/09 | K.R.     |
| P         | REVISED PER ECO 11169 | 3/25/15 | K.R.     |

| Nominal<br>Coil Voltage | Part Number |
|-------------------------|-------------|
| 12 Vdc                  | 402-220132  |
| 15 Vdc                  | 402-290132  |
| 24 Vdc                  | 402-280132  |
| 28 Vdc                  | 402-230132  |

|                           |   |      |           |                        |  |   |   |   |
|---------------------------|---|------|-----------|------------------------|--|---|---|---|
| REVISIONS                 | P | P    | P         |                        |  |   |  <b>DowKey<sup>®</sup><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>SW, SPDT, FAILSAFE<br/>N-FEMALE CONNECTORS,<br/>INDICATORS</b> |   |   |
| DRAWN<br>SARA LEE         |   |      | 03/05/09  |                        |  |   |   |   |
| ENGINEERING<br>T. JOHNSON |   |      | 3/25/2015 |                        |  |   |   |   |
| QUALITY<br>S. LYNCH       |   |      | 3/25/2015 |                        |  |   |   |   |
| MANUFACTURING<br>J. LEE   |   |      | 3/25/2015 |                        |  |   |   |   |
| CODE IDENT. NO.           |   |      |           | DWG. NO.               |  |   |   |   |
| <b>00471</b>              |   |      |           | <b>402-2X0132</b>      |  |   |   |   |
| SCALE                     |   | NONE |           | FINAL ASSY: 402-230132 |  |   | SHEET 1 OF 3  |   |

# OUTLINE DRAWING:



[ ] MILLIMETERS

UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:

.XXX  $\pm$ .010 ANGLES:  $\pm$ 3°  
.XX  $\pm$ .030

CODE IDENT. NO.  
**00471**

DWG. NO.  
**402-2X0132**

REV.  
**P**

SCALE NONE

FINAL ASSY: 402A-4801

SHEET 2 OF 3

# SPECIFICATION:

## 1.0 RF CHARACTERISTICS:

|                             |         |        |        |        |          |
|-----------------------------|---------|--------|--------|--------|----------|
| 1.1 FREQUENCY (GHz)         | DC - 1  | 1 - 2  | 2 - 4  | 4 - 8  | 8 - 12.4 |
| 1.2 VSWR (RATIO MAX)        | 1.15:1  | 1.20:1 | 1.25:1 | 1.45:1 | 1.50:1   |
| 1.3 INSERTION LOSS (dB MAX) | 0.15    | 0.20   | 0.25   | 0.40   | 0.50     |
| 1.4 ISOLATION (dB MIN)      | 85      | 80     | 70     | 60     | 60       |
| 1.5 RF POWER (WATTS CW MAX) | 600     | 400    | 300    | 225    | 175      |
| 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             | 260mA                                      |
|     | 15              | 13-17             | 230mA                                      |
|     | 24              | 20-28             | 145mA                                      |
|     | 28              | 24-32             | 110mA                                      |

2.2 SWITCHING TIME 20mS MAX  
 2.3 OPERATING MODE FAILSAFE

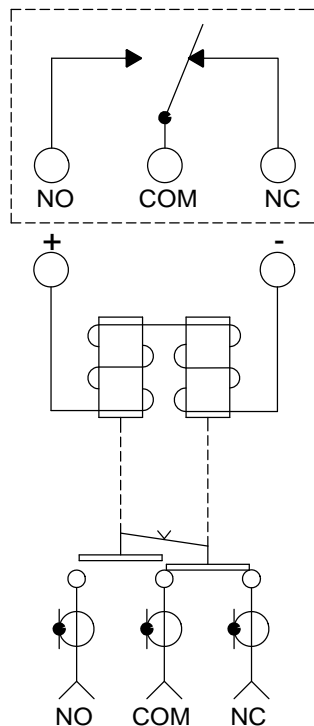
## 3.0 MECHANICAL:

3.1 CONTACT ARRANGEMENT SPDT  
 3.2 RF CONTACTS BREAK BEFORE MAKE  
 3.3 WEIGHT 7.5oz (212g) 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: GASKET

# SCHMATIC:



SWITCH SHOWN IN THE DE-ENERGIZED POSITION

|                                 |                               |                  |
|---------------------------------|-------------------------------|------------------|
| CODE IDENT. NO.<br><b>00471</b> | DWG. NO.<br><b>402-2X0132</b> | REV.<br><b>P</b> |
| SCALE NONE                      | FINAL ASSY: 402-230132        | SHEET 3 OF 3     |