



- DC-18 GHz
- DC-26.5 GHz
- DC-40 GHz
- Low/Medium Power
- 1M Life Cycles

## RF Characteristics

Frequency GHz	VSWR (max)	Isolation dB (min)	Ins. Loss dB (max)
DC-4	1.20	70	0.20
4-8	1.30	65	0.30
8-12.4	1.40	65	0.40
12.4-18	1.50	60	0.50
*18-26.5	1.80	50	0.80
DC-40	Consult with factory for data		

\*Performance varies depending on selected options

## Specifications

### Operating Voltage:

- 12 Vdc (11-14 Vdc)
- 24 Vdc (20-28 Vdc)
- 28 Vdc (24-32 Vdc)

### Coil Current (max. @ nom. Vdc & 25°C)\*:

- 12 Vdc 355 mA
- 24 Vdc 200 mA
- 28 Vdc 170 mA

### Switching Time:

20 ms maximum

### Operating Temperature:

- 25°C to +65°C (Standard)
- 55°C to +85°C (Extended "T" Option)

### Mechanical Life Cycles:

1,000,000 minimum

### Vibration, Operating:

10G RMS, 20-2000 Hz

### Mechanical Shock, Non-Operating:

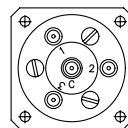
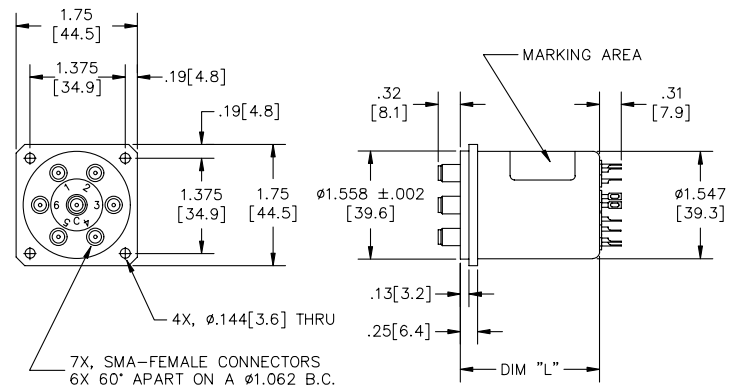
50G, 1/2 Sine, 11 ms

### Nominal Weight\*:

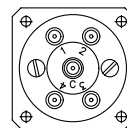
4.0 oz. (113 g.)

\* Performance and weight varies depending on selected options.

## Mechanical



3 POSITION



4 POSITION

DIM "L" (MAX)	MODEL	ELEC. SCHEM.
1.41 [35.8]	5X5-5X08	1
1.90 [48.3]	5X5-5X0822	1
1.70 [43.2]	5X5-5X0802A	2
2.10 [53.3]	5X5-5X0822A	2

565-530822 Shown

For Electrical Schematic, see page # 3-20

## Part Number Selector


**535 J - 5 2 08 02 A - ROHS**

Family	Special Options	Actuator	Coil Voltage	Connectors	Indicators	Circuit Options
535 = SP3T	C = Mounting Bracket	5 = Normally Open	2 = 12 Vdc	07 = BMA Female	02 = No Indicators***	A = TTL High
545 = SP4T	J = 9 or 15 Pin 'D' Connector	9 = Normally Open Suppression Diodes	3 = 28 Vdc	08 = SMA Female	22 = SPST Indicators	E = BCD Decoding
565 = SP6T	K = 26.5 GHz	2 = Failsafe **	8 = 24 Vdc	11 = 2.9 mm (K)		L = TTL Low
	P = Power Plug	* Only available with N.O.	9 = 15 Vdc		*** Declared only with Circuit Options	
	R = (-) Com*	Suppression Diodes				
	S = Epoxy Seal	** Only available options are:				
	T = -55° to +85° C	535-2308				
	W = Low PIM	545-2308				
	Y = 40 GHz	565-2308				

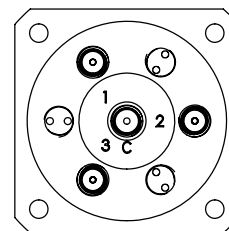
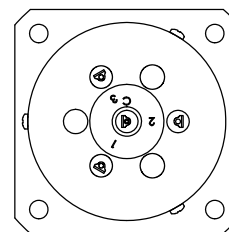
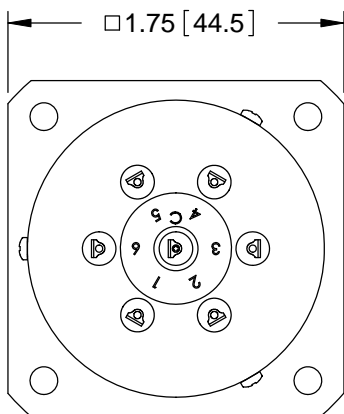
Note: TTL option includes suppression diode. Other options may be available and all combinations may not be possible. Please consult with factory.

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
B	REVISED PER ECO 5374	11/02/98	J.A.
C	REVISED AND REDRAWN PER ECO 11022	12/2/14	K.R.

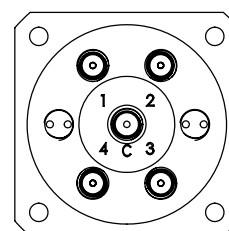
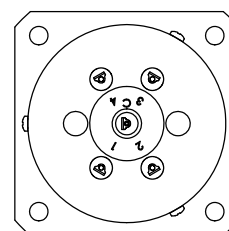
Nominal Coil Voltage	Part Number		
	SP3T	SP4T	SP6T
12 Vdc	535-5208	545-5208	565-5208
15 Vdc	535-5908	545-5908	565-5908
24 Vdc	535-5808	545-5808	565-5808
28 Vdc	535-5308	545-5308	565-5308

REVISIONS	C	C	C				 <b>DowKey<sup>®</sup> Microwave</b> CORPORATION <small>A DOVER TECHNOLOGIES COMPANY</small>	4822 McGrath Street Ventura, CA. 93003-5641 PH: (805) 650-0260 FAX: (805) 650-1734	
SHEET NO.	1	2	3						
APPROVALS			DATE			<b>SW, 3-6 POSITION SMA-FEMALE CONNECTORS NORMALLY OPEN</b>			
DRAWN SARA LEE			11/20/14						
ENGINEERING T. JOHNSON			12/1/2014						
QUALITY G. WAKEFIELD			12/2/2014						
MANUFACTURING J. LEE			12/2/2014			CODE IDENT. NO. <b>00471</b>	DWG. NO. <b>5X5-5X08</b>	SCALE NONE FINAL ASSY: 565-5308	SHEET 1 OF 3

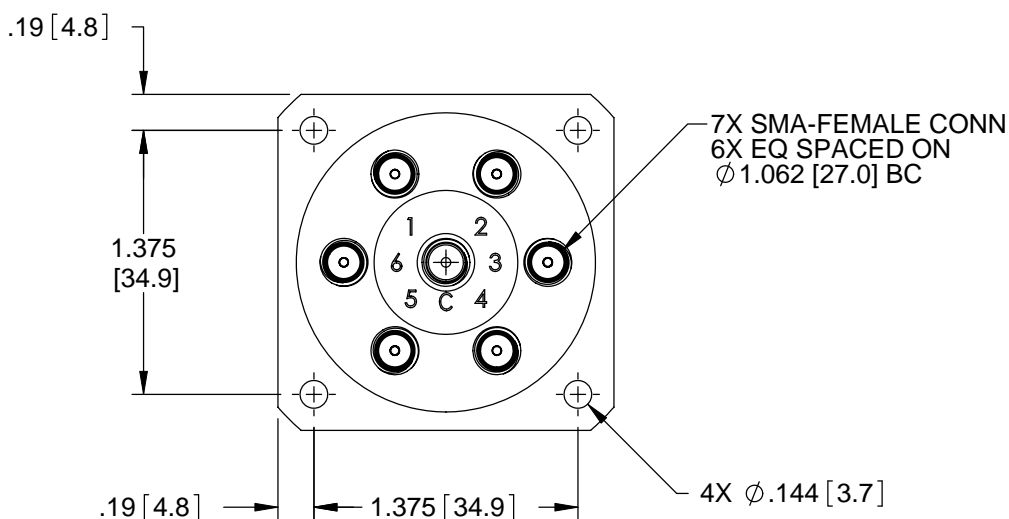
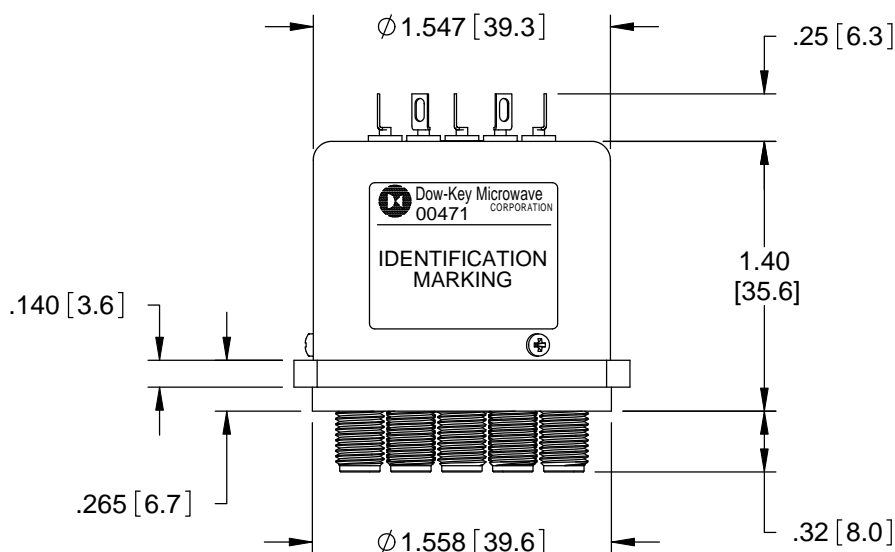
# OUTLINE DRAWING:



3 POSITION



4 POSITION



[ ] MILLIMETERS

UNLESS OTHERWISE SPECIFIED TOLERANCES ARE: .XXX ±.010 ANGLES: ±3° .XX ±.030	CODE IDENT. NO. <b>00471</b>	DWG. NO. <b>5X5-5X08</b>	REV. <b>C</b>
	SCALE NONE	FINAL ASSY: TBD	SHEET 2 OF 3

# SPECIFICATION:

## 1.0 RF CHARACTERISTICS:

1.1 FREQUENCY (GHz)	DC - 4	4 - 8	8 - 12.4	12.4 - 18
1.2 VSWR (RATIO MAX)	1.20:1	1.30:1	1.40:1	1.50:1
1.3 INSERTION LOSS (dB MAX)	0.20	0.30	0.40	0.50
1.4 ISOLATION (dB MIN)	70	65	65	60
1.5 RF POWER (WATTS CW MAX)	125	90	75	60
1.6 IMPEDANCE (NOMINAL)	50 OHMS			

## 2.0 ACTUATION DATA:

2.1	NOMINAL VOLTAGE	OPERATING VOLTAGE	CURRENT (TYP) @ NOMINAL VOLTAGE & 25°C
	12	11-14	335mA
	15	13-17	280mA
	24	20-28	190mA
	28	24-32	160mA

2.2 SWITCHING TIME 20mS MAX  
 2.3 OPERATING MODE NORMALLY OPEN

## 3.0 MECHANICAL:

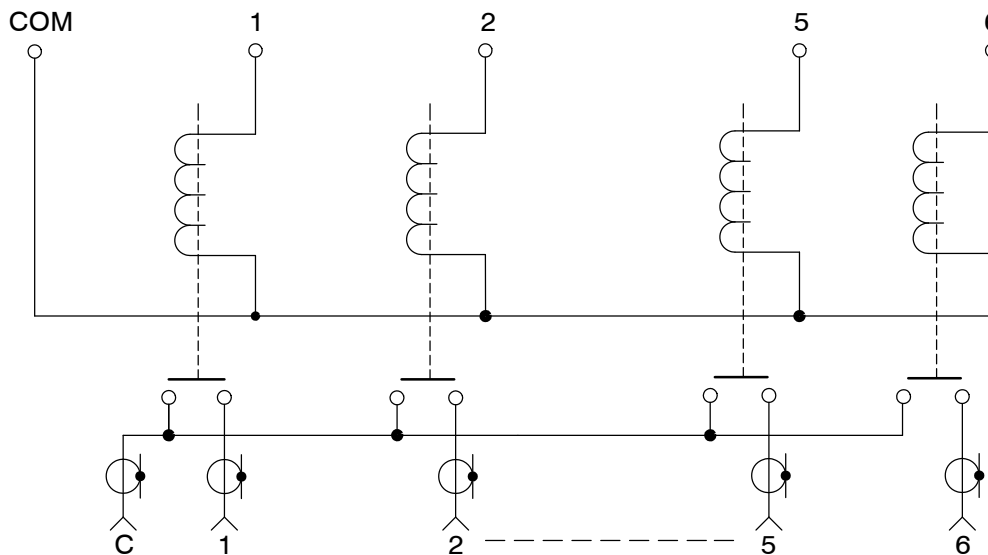
3.1 RF CONTACTS BREAK BEFORE MAKE  
 3.2 WEIGHT 3.8oz (108g) NOMINAL  
 3.3 DESIGN LIFE 2,000,000 CYCLES MINIMUM

## 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

# SCHMATIC:

TERMINALS ARE NOT POLARITY SENSITIVE



SWITCH SHOWN IN THE DE-ENERGIZED POSITION

CODE IDENT. NO. <b>00471</b>	DWG. NO. <b>5X5-5X08</b>	REV. <b>C</b>
SCALE NONE	FINAL ASSY: 565-5308	SHEET 3 OF 3