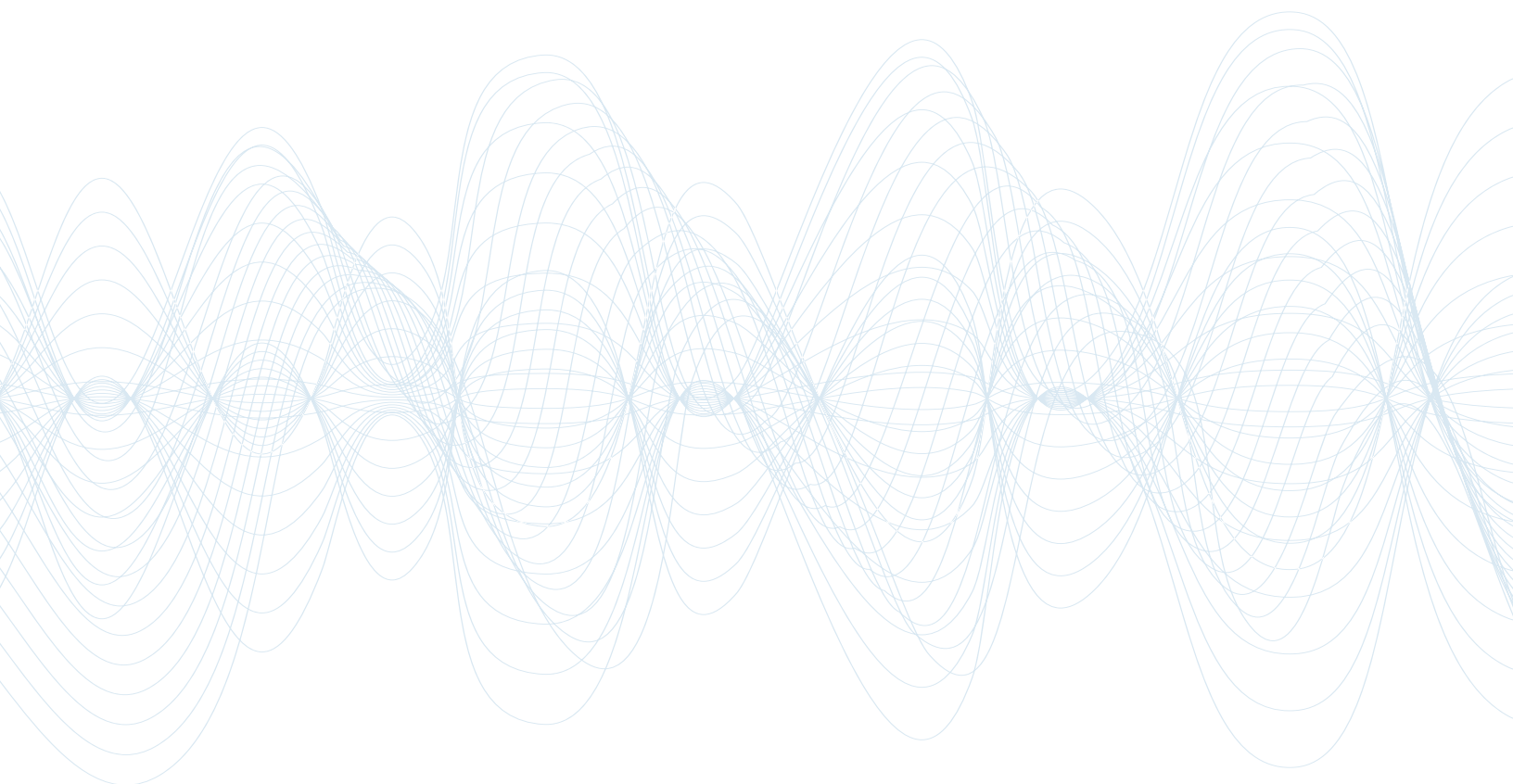


SPDT COAXIAL SWITCH





- DC-18 GHz
- DC-26.5 GHz
- DC-40 GHz
- Low/Medium Power
- 1M/5M Life Cycles

RF Characteristics

Frequency GHz	VSWR (max)	Isolation dB (min)	Ins. Loss dB (max)
DC-1	1.10	85	0.10
1-4	1.15	80	0.15
4-8	1.20	70	0.20
8-12	1.30	65	0.30
12-18	1.35	60	0.35
*18-26.5	1.50	55	0.50
*26.5-40	1.90	55	0.80

*Performance varies depending on selected options

Specifications

Operating Voltage (across temperature range):

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

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

- 12 Vdc 195 mA
- 24 Vdc 125 mA
- 28 Vdc 95 mA

Switching Time:

15 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
- 5,000,000 minimum ("U" Option)

Vibration, Operating:

10G RMS, 20-2000 Hz

Mechanical Shock, Non-Operating:

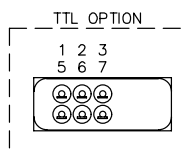
50G, 1/2 Sine, 11 ms

Nominal Weight*:

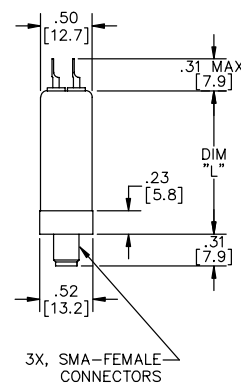
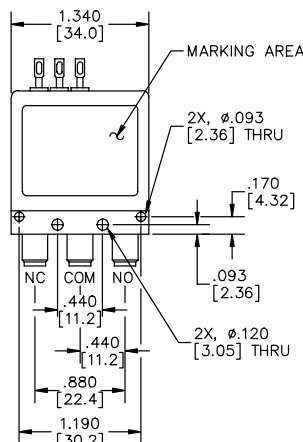
1.4 oz. (40 g.)

* Performance and weight varies depending on selected options. Values listed are for Standard 401 Failsafe model.

Mechanical



DIM "L" (MAX)	MODEL	ELEC. SCHEM.
1.40 [35.6]	401-2X08	1
1.40 [35.6]	401-2X0832	1
1.80 [45.7]	401-2X0802A	2
1.80 [45.7]	401-2X0832A	2



401-2X0832 Shown
For Electrical Schematic, see page # 1-5

Part Number Selector

401 J - 2 2 08 02 A - ROHS

Special Options	Actuator	Coil Voltage	Connectors	Indicators	Circuit Options
A = High Power	2 = Failsafe	2 = 12 Vdc	08 = SMA Female	02 = No Indicators*	A = TTL High
I = Immersion Seal	6 = Failsafe with Suppression Diode	3 = 28 Vdc	11 = 2.9 mm (K)	32 = Indicators	B = TTL High Military (JANTX)
J = 'D' Connector		8 = 24 Vdc	19 = PCB Pin Mount		L = TTL Low
K = 26.5 GHz		9 = 15 Vdc			
S = Epoxy Seal					
T = -55°C to + 85°C					
U = 5M Life Cycles					
W = Low PIM					
Y = 40 GHz					

*Declared only with Circuit Options

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



- DC-18 GHz
- DC-26.5 GHz
- DC-40 GHz
- Low/Medium Power
- 1M/5M Life Cycles

RF Characteristics

Frequency GHz	VSWR (max)	Isolation dB (min)	Ins. Loss dB (max)
DC-1	1.10	85	0.10
1-4	1.15	80	0.15
4-8	1.20	70	0.20
8-12	1.30	65	0.30
12-18	1.35	60	0.35
*18-26.5	1.50	55	0.50
*26.5-40	1.90	55	0.80

*Performance varies depending on selected options

Specifications

Operating Voltage (across temperature range):

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

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

- 12 Vdc 230 mA
- 24 Vdc 135 mA
- 28 Vdc 115 mA

Switching Time:

15 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
- 5,000,000 minimum ("U" Option)

Vibration, Operating:

10G RMS, 20-2000 Hz

Mechanical Shock, Non-Operating:

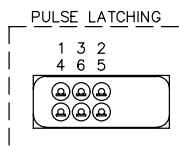
50G, 1/2 Sine, 11 ms

Nominal Weight*:

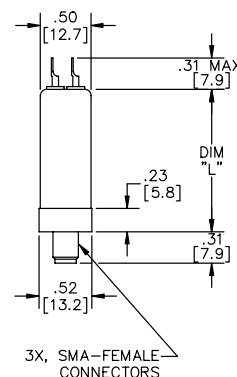
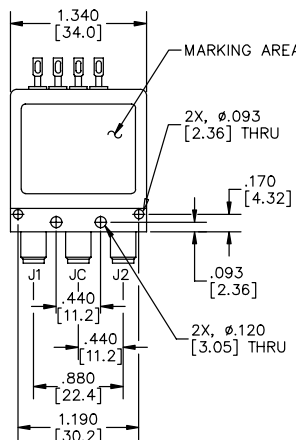
1.4 oz. (40 g.)

* Performance and weight varies depending on selected options. Values listed are for Standard 401 Latching model.

Mechanical



DIM "L" (MAX)	MODEL	ELEC. SCHEM.
1.40 [35.6]	401-3X08	3
1.40 [35.6]	401-3X0832	3
1.80 [45.7]	401-4X08	4
1.80 [45.7]	401-4X0832	4
1.80 [45.7]	401-4X0802A	5
1.80 [45.7]	401-4X0832A	5



401-4X0832 Shown
For Electrical Schematic, see page # 1-5

Part Number Selector

401 J - 4 2 08 02 A - ROHS

Special Options	Actuator	Coil Voltage	Connectors	Indicators	Circuit Options
A = High Power	3 = Pulse Latching	2 = 12 Vdc	08 = SMA Female	02 = No Indicators*	A = TTL High
I = Immersion Seal	4 = Latching Self Cutoff	3 = 28 Vdc	11 = 2.9 mm (K)	32 = Indicators	L = TTL Low
J = 'D' Connector	7 = Pulse Latching with Suppression Diode	8 = 24 Vdc	19 = PCB Pin Mount		
K = 26.5 GHz		9 = 15 Vdc		*Declared only with Circuit Options	
S = Epoxy Seal					
T = -55°C to + 85°C					
U = 5M Life Cycles					
W = Low PIM					
Y = 40 GHz					

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



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

RF Characteristics

Frequency GHz	VSWR (max)	Isolation dB (min)	Ins. Loss dB (max)
DC-1	1.10	85	0.10
1-4	1.15	80	0.15
4-8	1.20	70	0.20
8-12	1.30	65	0.30
12-18	1.35	60	0.35
*18-26.5	1.50	55	0.50
*26.5-40	1.90	55	0.80

*Performance varies depending on selected options

Specifications

Operating Voltage (across temperature range):

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

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

- 12 Vdc 195 mA
- 24 Vdc 125 mA
- 28 Vdc 95 mA

Switching Time:

15 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:

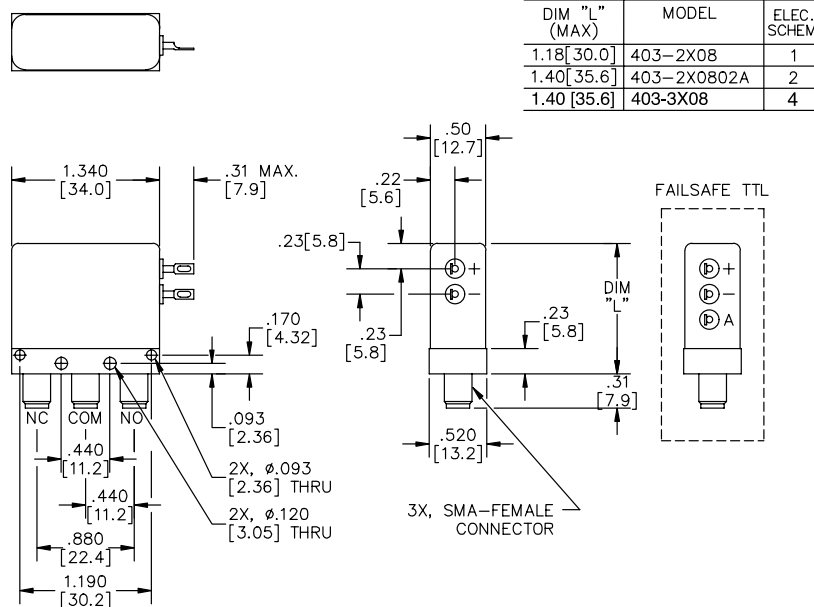
50G, 1/2 Sine, 11 ms

Nominal Weight*:

1.3 oz. (37 g.)

* Performance and weight varies depending on selected options. Values listed are for Standard 403 Failsafe model.

Mechanical



403-2X0832 Shown

For Electrical Schematic, see page #1-5

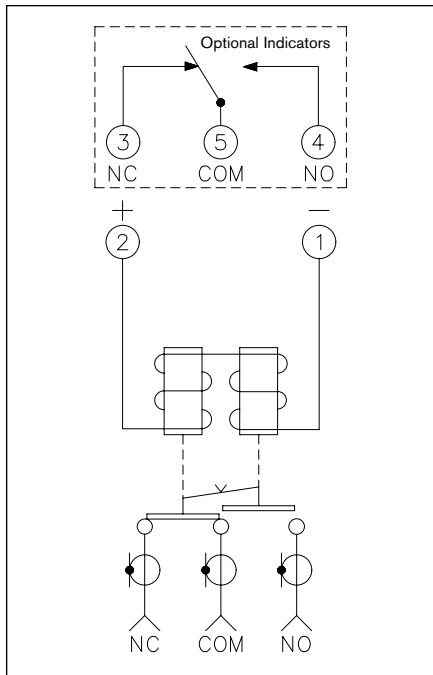
Part Number Selector

403 A - 2 2 08 02 A - ROHS

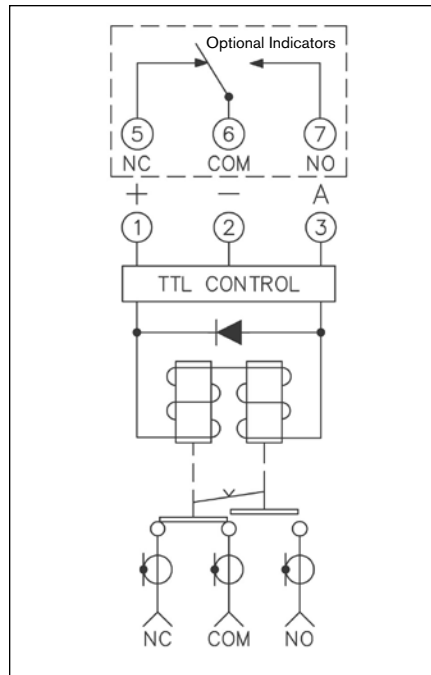
Special Options	Actuator	Coil Voltage	Connectors	Indicators	Circuit Options
A = High Power	2 = Failsafe	2 = 12 Vdc	08 = SMA Female	02 = No Indicators*	A = TTL High
I = Immersion Seal	3 = Pulse Latching	3 = 28 Vdc	11 = 2.9 mm (K)		
K = 26.5 GHz	6 = Failsafe with	8 = 24 Vdc	19 = PCB Pin Mount	*Declared only with	
S = Epoxy Seal	Suppression Diode	9 = 15 Vdc		Circuit Options	
T = -55°C to + 85°C					
Y = 40 GHz					

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

01 401/403 Failsafe



02 401/403 Failsafe TTL



03 Logic Truth Table

FAILSAFE TTL - SCH #2

LOGIC TRUTH TABLE		
RF PATH	INDICATOR PATH	LOGIC INPUT "A"
NC-COM	NC-COM	0
NO-COM	NO-COM	1

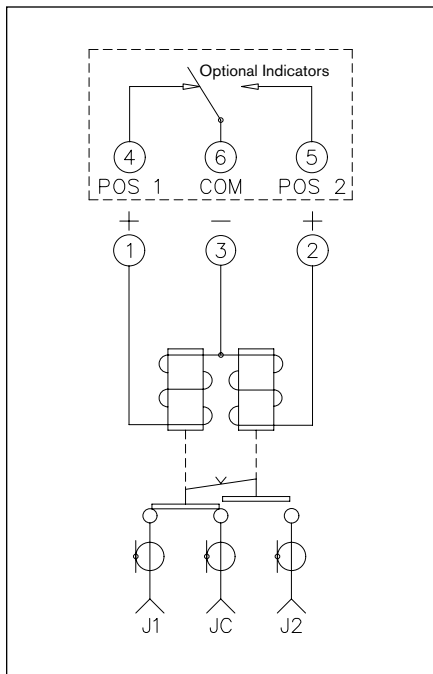
"0" = 0.0V-0.8V
 "1" = 2.4V-5.5V

SELF CUTOFF TTL - SCH #6

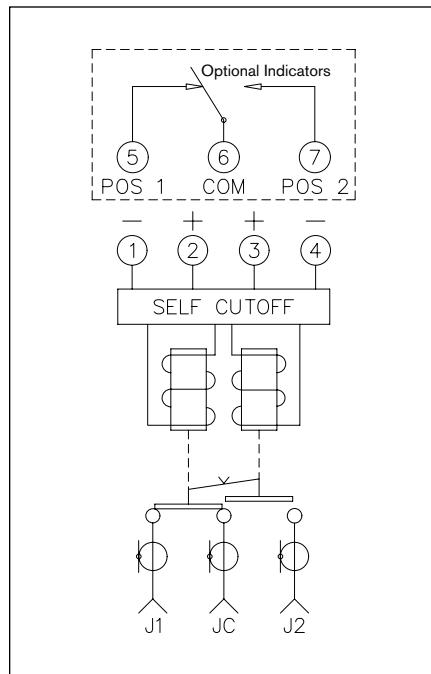
LOGIC TRUTH TABLE			
RF PATH	INDICATOR PATH	LOGIC INPUT "A"	LOGIC INPUT "B"
JC-J1	COM-1	1	0
JC-J2	COM-2	0	1

"0" = 0.0V-0.8V
 "1" = 2.4V-5.5V

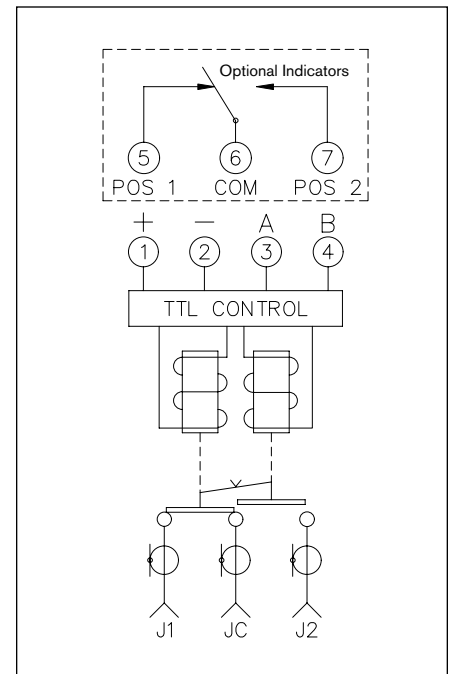
04 401/403 Pulse



05 401 Self Cutoff



06 401 Self Cutoff TTL





- DC-2 GHz
- DC-6 GHz
- DC-12.4 GHz
- Medium/High Power
- 1M Life Cycles

RF Characteristics

Frequency GHz	VSWR (max)	Isolation dB (min)	Ins. Loss dB (max)
DC-1	1.15	85	0.15
1-2	1.20	80	0.20
2-4	1.25	70	0.25
4-8	1.35	60	0.40
8-12.4	1.50	60	0.50

Note: Performance applies to N, BNC, and TNC type connectors. Consult with factory for SC-type connectors.

Specifications

Operating Voltage (across temperature range):

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

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

- 12 Vdc 275 mA
- 24 Vdc 155 mA
- 28 Vdc 115 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:

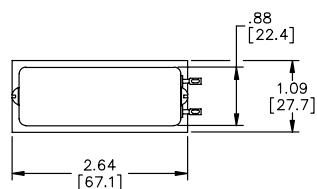
50G, 1/2 Sine, 11 ms

Nominal Weight*:

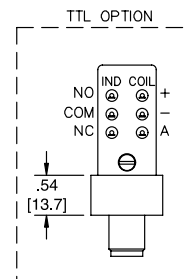
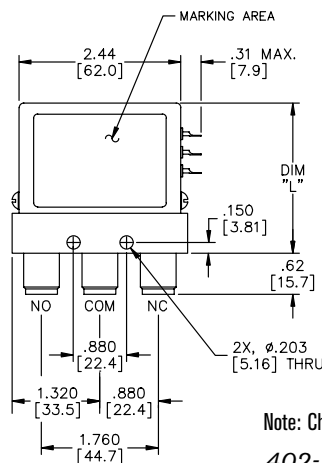
9.0 oz. (255 g.)

* Performance and weight varies depending on selected options. Values listed are for Standard 402 Failsafe model.

Mechanical



DIM "L" (MAX)	MODEL*	ELEC. SCHEM.
2.30 [58.4]	402-2X01	1
2.30 [58.4]	402-2X0132	1
2.30 [58.4]	402-2X0102A	2
2.30 [58.4]	402-2X0132A	2



Note: Chart reflects N, BNC, and TNC type of connectors only.

402-2X0132 Shown
For Electrical Schematic, see page # 1-8

Part Number Selector

402 J - 2 2 01 02 A - ROHS

Special Options	Actuator	Coil Voltage	Connectors	Indicators	Circuit Options
A = High Power	2 = Failsafe	2 = 12 Vdc	01 = N Female	02 = No Indicators**	A = TTL High
I = Immersion Seal	6 = Failsafe with	3 = 28 Vdc	02 = BNC Female	32 = Indicators	B = TTL High Military (JANTX)
J = 'D' Connector	Suppression Diode	8 = 24 Vdc	03 = TNC Female	**Declared only with	L = TTL Low
P = Power Connector		9 = 15 Vdc	53 = SC Female*	Circuit Options	
S = Epoxy Seal					
T = -55°C to +85°C					

*Consult Dow-Key for dimensions

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



- DC-2 GHz
- DC-6 GHz
- DC-12.4 GHz
- Medium/High Power
- 1M Life Cycles

RF Characteristics

Frequency GHz	VSWR (max)	Isolation dB (min)	Ins. Loss dB (max)
DC-1	1.15	85	0.15
1-2	1.20	80	0.20
2-4	1.25	70	0.25
4-8	1.35	60	0.40
8-12.4	1.50	60	0.50

Note: Performance applies to N, BNC, and TNC type connectors. Consult with factory for SC-type connectors.

Specifications

Operating Voltage (across temperature range):

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

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

- 12 Vdc 320 mA
- 24 Vdc 180 mA
- 28 Vdc 135 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:

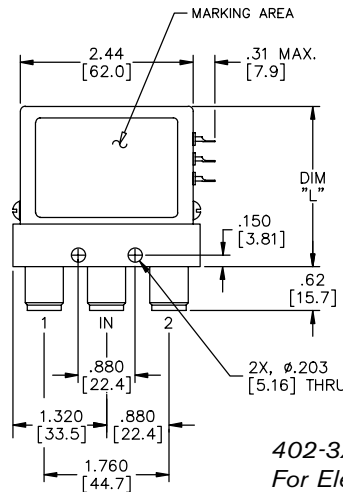
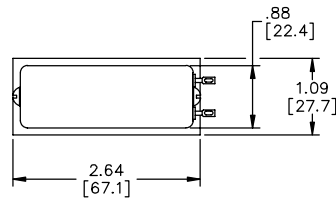
50G, 1/2 Sine, 11 ms

Nominal Weight*:

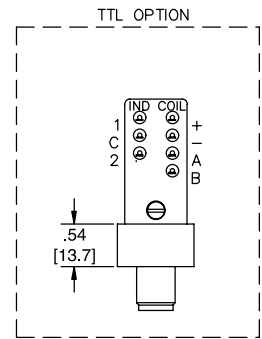
9.0 oz. (255 g.)

* Performance and weight varies depending on selected options. Values listed are for Standard 402 Latching model.

Mechanical



DIM "L" (MAX)	MODEL *	ELEC. SCHEM.
2.30 [58.4]	402-3X01	4
2.30 [58.4]	402-3X0132	4
2.40 [61.0]	402-4X01	5
2.40 [61.0]	402-4X0132	5
2.40 [61.0]	402-4X0102A	6
2.40 [61.0]	402-4X0132A	6



402-3X0132 Shown
For Electrical Schematic, see page # 1-8

Part Number Selector

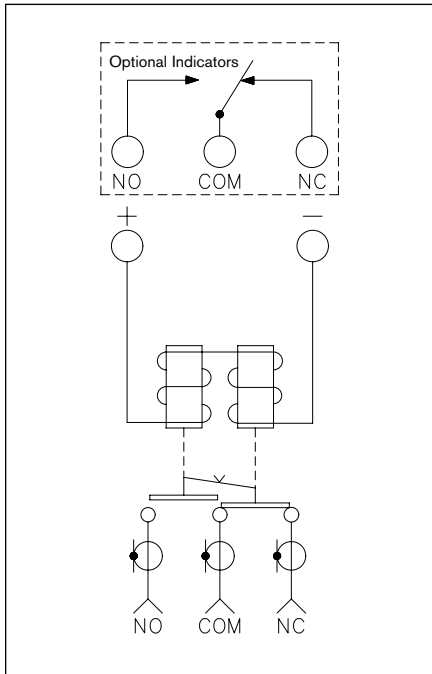
402 J - 4 2 01 02 A - ROHS

Special Options	Actuator	Coil Voltage	Connectors	Indicators	Circuit Options
A = High Power	3 = Pulse Latching	2 = 12 Vdc	01 = N Female	02 = No Indicators**	A = TTL High
I = Immersion Seal	4 = Latching Self Cutoff	3 = 28 Vdc	02 = BNC Female	32 = Indicators	B = TTL High Military (JANTX)
J = 'D' Connector	7 = Pulse Latching with Suppression Diodes	8 = 24 Vdc	03 = TNC Female	**Declared only with Circuit Options	L = TTL Low
P = Power Connector		9 = 15 Vdc	53 = SC Female*		
S = Epoxy Seal					
T = -55°C to + 85°C					

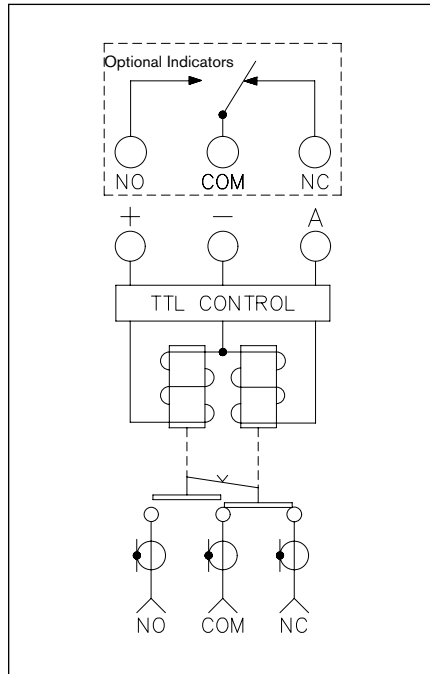
*Consult Dow-Key for dimensions

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

01 402 Failsafe



02 402 Failsafe TTL



03 Logic Truth Table

FAILSAFE TTL - SCH #2

LOGIC TRUTH TABLE		
RF PATH	INDICATOR PATH	LOGIC INPUT "A"
NC-COM	NC-COM	0
NO-COM	NO-COM	1

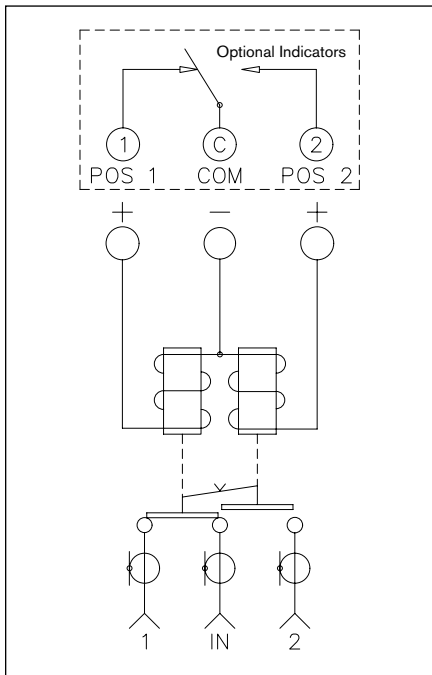
"0" = 0.0V-0.8V
 "1" = 2.4V-5.5V

SELF CUTOFF TTL - SCH #6

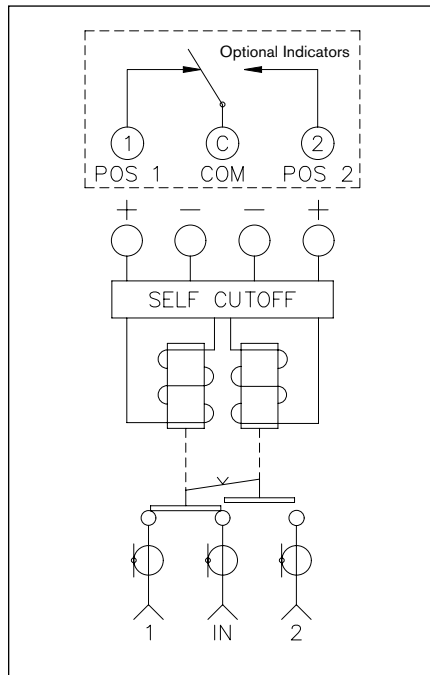
LOGIC TRUTH TABLE			
RF PATH	INDICATOR PATH	LOGIC INPUT "A"	LOGIC INPUT "B"
IN-1	COM-1	1	0
IN-2	COM-2	0	1

"0" = 0.0V-0.8V
 "1" = 2.4V-5.5V

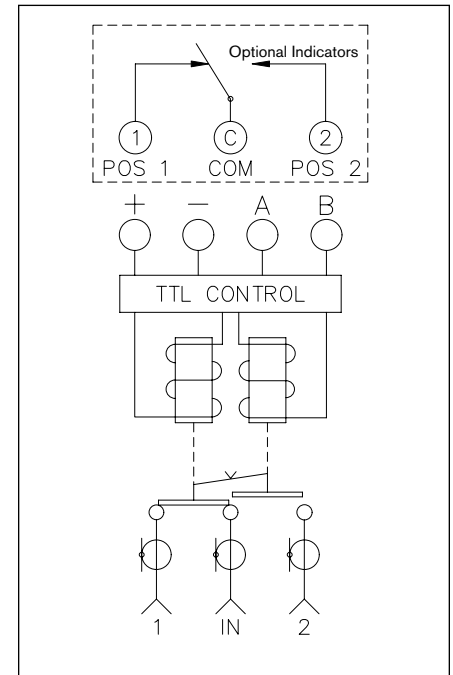
04 402 Pulse



05 402 Self Cutoff



06 402 Self Cutoff TTL



RF Characteristics

Frequency GHz	VSWR (max)	Isolation dB (min)	Ins. Loss dB (max)	RF Power Watts (CW)
DC-1	1.10	75	0.15	100
1-2	1.20	70	0.20	100
2-3	1.20	65	0.25	100



- DC-3 GHz
- Low/Medium Power
- 1M Life Cycles

409V SPDT Latching with test fixture



Note: Test fixture is available separately.

Specifications

Operating Voltage:

5 Vdc (4.75 - 5.25 Vdc)

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

5 Vdc 85 mA

Switching Time:

5 ms maximum

Operating Temperature:

-55 °C to +85°C

Mechanical Life Cycles:

1,000,000 minimum

Vibration, Operating:

10G RMS, 20-2000 Hz

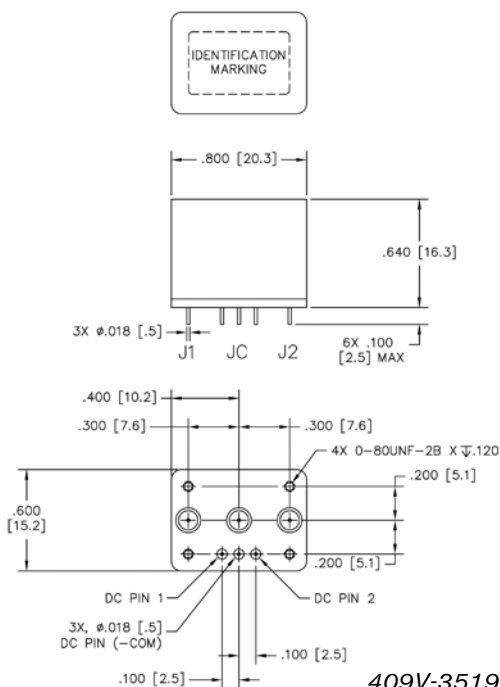
Mechanical Shock, Non-Operating:

50G, 1/2 Sine, 11 ms

Nominal Weight:

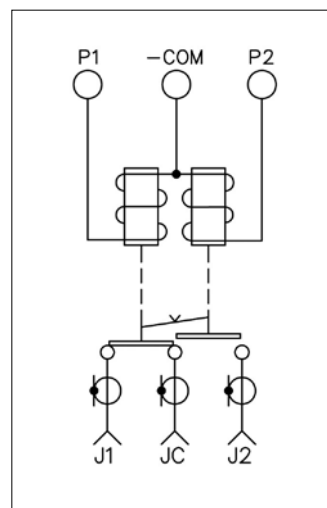
0.5 oz. (15 g.)

Mechanical

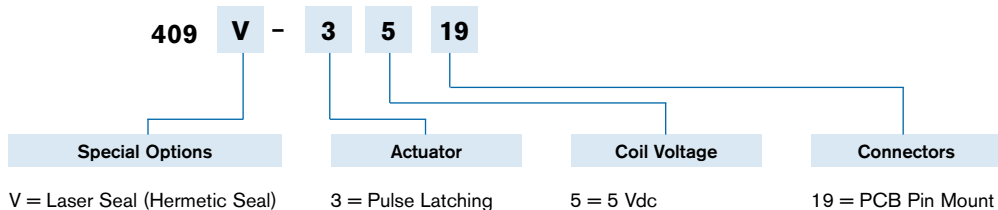


409V-3519 Shown

Electrical Schematic



Part Number Selector





- DC-18 GHz
- DC-26.5 GHz
- Low/Medium Power
- 5M Life Cycles

RF Characteristics

Frequency GHz	VSWR (max)	Isolation dB (min)	Ins. Loss dB (max)
DC-1	1.10	85	0.10
1-4	1.15	80	0.15
4-8	1.20	70	0.20
8-12	1.30	65	0.30
12-18	1.35	60	0.35
*18-26.5	1.50	55	0.50

*Performance varies depending on selected options

Specifications

Operating Voltage (across temperature range):

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

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

- 12 Vdc 450 mA
- 24 Vdc 225 mA
- 28 Vdc 200 mA

Switching Time:

15 ms maximum

Operating Temperature:

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

Mechanical Life Cycles:

5,000,000 minimum

Vibration, Operating:

10 G RMS, 20-2000 Hz

Mechanical Shock, Non-Operating:

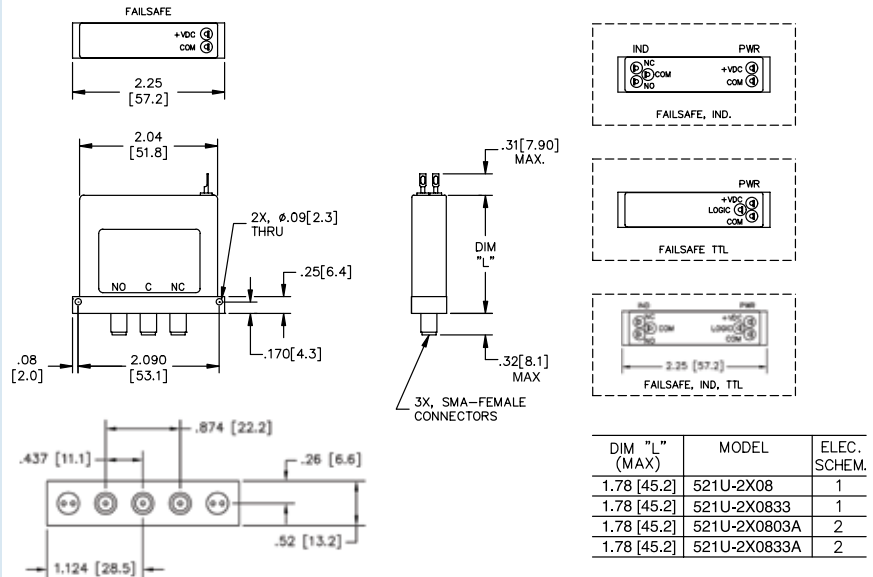
50 G, 1/2 Sine, 11 ms

Nominal Weight*:

2.5 oz. (71 g.)

* Performance and weight varies depending on selected options.

Mechanical



521U-2X0803 Shown

For Electrical Schematic, see page # 1-14

Part Number Selector

521 J U - 2 2 08 03 A - ROHS

Special Options	Actuator	Coil Voltage	Connectors	Indicators	Circuit Options
I = Immersion Seal	2 = Failsafe	2 = 12 Vdc	08 = SMA Female	02 = No Indicators, Unterminated Ports*	A = TTL High
J = 'D' Connector	6 = Failsafe with Suppression Diode	3 = 28 Vdc		03 = No Indicators, 2W Terminations	L = TTL Low
K = 26.5 GHz		8 = 24 Vdc		32 = Indicators, Unterminated Ports	
R = (+) Com		9 = 15 Vdc		33 = Indicators, 2W Terminations	*Declared only with Circuit Options
T = -55°C to +85°C					
W = Low PIM					

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



- DC-18 GHz
- DC-26.5 GHz
- Low/Medium Power
- 5M Life Cycles

RF Characteristics

Frequency GHz	VSWR (max)	Isolation dB (min)	Ins. Loss dB (max)
DC-1	1.10	85	0.10
1-4	1.15	80	0.15
4-8	1.20	70	0.20
8-12	1.30	65	0.30
12-18	1.35	60	0.35
*18-26.5	1.50	55	0.50

*Performance varies depending on selected options

Specifications

Operating Voltage (across temperature range):

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

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

- 12 Vdc 265 mA
- 24 Vdc 205 mA
- 28 Vdc 175 mA

Switching Time:

15 ms maximum

Operating Temperature:

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

Mechanical Life Cycles*:

5,000,000 minimum

Vibration, Operating:

10 G RMS, 20-2000 Hz

Mechanical Shock, Non-Operating:

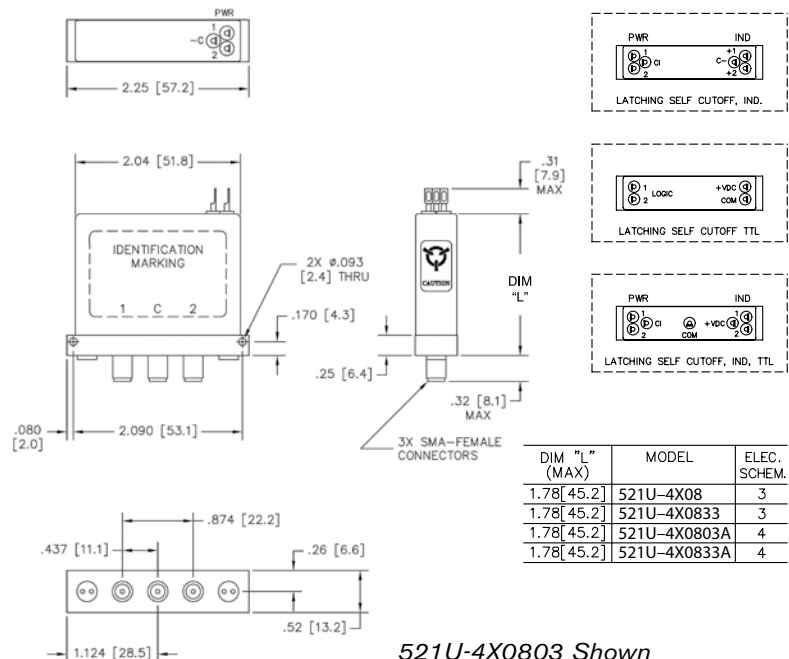
50 G, 1/2 Sine, 11 ms

Nominal Weight*:

2.5 oz. (71 g.)

* Performance and weight varies depending on selected options.

Mechanical



521U-4X0803 Shown

For Electrical Schematic, see page # 1-14

Part Number Selector

521 J U - 4 2 08 03 A - ROHS

Special Options	Actuator	Coil Voltage	Connectors	Indicators	Circuit Options
I = Immersion Seal	3 = Pulse Latching	2 = 12 Vdc	08 = SMA Female	02 = No Indicators, Unterminated Ports*	A = TTL High
J = 'D' Connector	4 = Latching Self Cutoff	3 = 28 Vdc		03 = No Indicators, 2W Terminations	L = TTL Low
K = 26.5 GHz		8 = 24 Vdc		32 = Indicators, Unterminated Ports	
R = (+) Com		9 = 15 Vdc		33 = Indicators, 2W Terminations	*Declared only with Circuit Options
T = -55°C to +85°C					
W = Low PIM					

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



- DC-40 GHz
- Low Power
- 1M Life Cycles

RF Characteristics

Frequency GHz	VSWR (max)	Isolation dB (min)	Ins. Loss dB (max)
DC-6	1.30	80	0.30
6-12	1.40	70	0.40
12-18	1.50	65	0.50
18-26.5	1.70	60	0.70
26.5-40	1.80	55	0.80

Specifications

Operating Voltage (across temperature range):

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

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

- 12 Vdc 450 mA
- 24 Vdc 225 mA
- 28 Vdc 200 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:

10 G RMS, 20-2000 Hz

Mechanical Shock, Non-Operating:

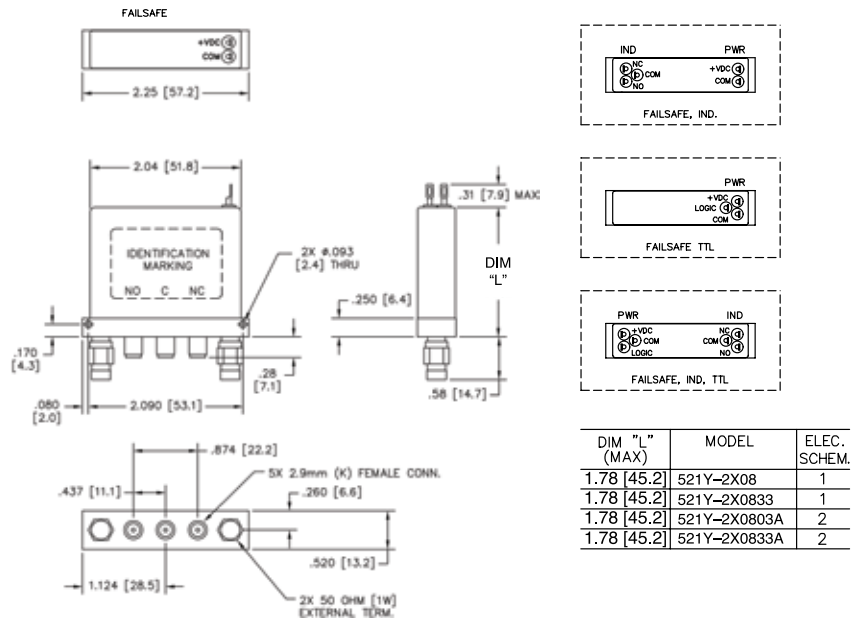
50 G, 1/2 Sine, 11 ms

Nominal Weight*:

2.5 oz. (71 g.)

* Performance and weight varies depending on selected options.

Mechanical



521Y-221103 shown

For Electrical Schematic, see page # 1-14

Part Number Selector

521 J Y - 2 2 11 03 A - ROHS

Special Options	Actuator	Coil Voltage	Connectors	Indicators	Circuit Options
I = Immersion Seal	2 = Failsafe	2 = 12 Vdc	11 = 2.9 mm	02 = No Indicators, Unterminated Ports*	A = TTL High
J = 'D' Connector		3 = 28 Vdc		03 = No Indicators, 1W External Terminations	L = TTL Low
T = -55°C to +85°C		8 = 24 Vdc		32 = Indicators, Unterminated Ports	
		9 = 15 Vdc		33 = Indicators, 1W External Terminations	

*Declared only with Circuit Options

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



- DC-40 GHz
- Low Power
- 1M Life Cycles

RF Characteristics

Frequency GHz	VSWR (max)	Isolation dB (min)	Ins. Loss dB (max)
DC-6	1.30	80	0.30
6-12	1.40	70	0.40
12-18	1.50	65	0.50
18-26.5	1.70	60	0.70
26.5-40	1.80	55	0.80

Specifications

Operating Voltage (across temperature range):

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

Coil Current (typ. @ nom. Vdc & 25°C)*:

- 12 Vdc 440 mA
- 24 Vdc 220 mA
- 28 Vdc 190 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:

10 G RMS, 20-2000 Hz

Mechanical Shock, Non-Operating:

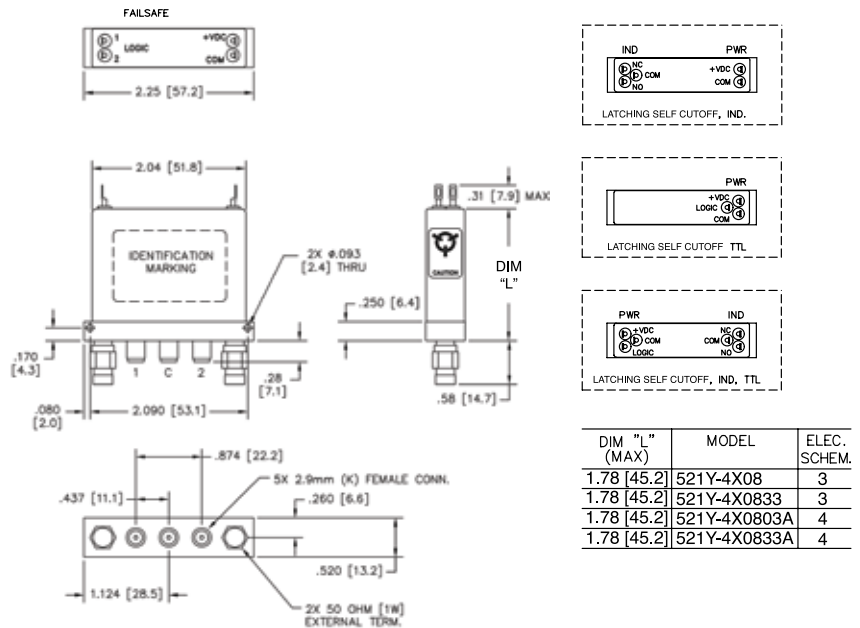
50 G, 1/2 Sine, 11 ms

Nominal Weight*:

2.5 oz. (71 g.)

* Performance and weight varies depending on selected options.

Mechanical

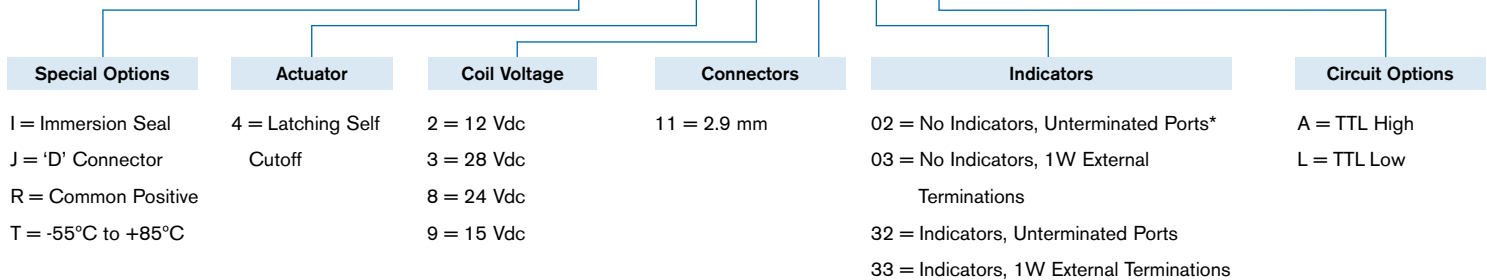


521Y-421103A shown

For Electrical Schematic, see page # 1-14

Part Number Selector

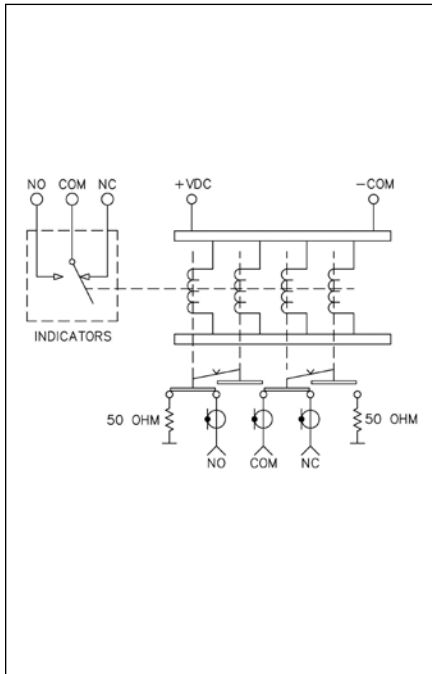
521 J Y - 4 2 11 03 A - ROHS



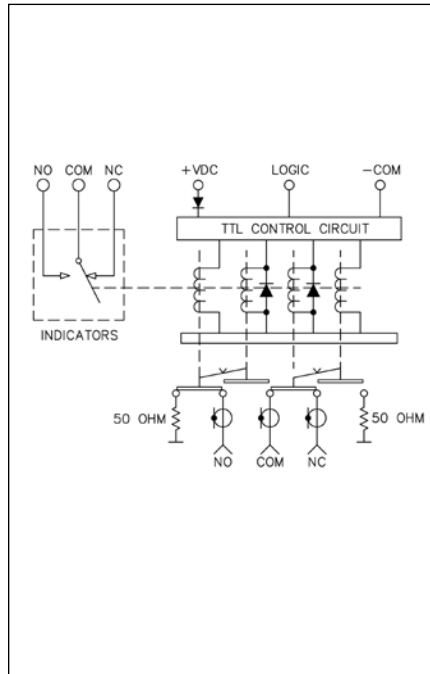
*Declared only with Circuit Options

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

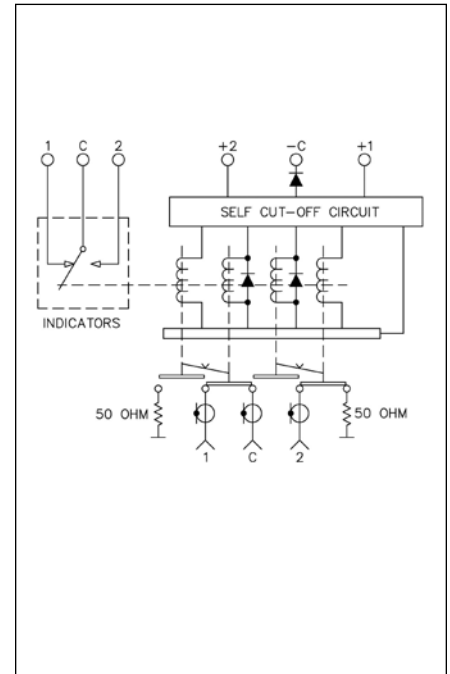
01 521U/521Y Failsafe



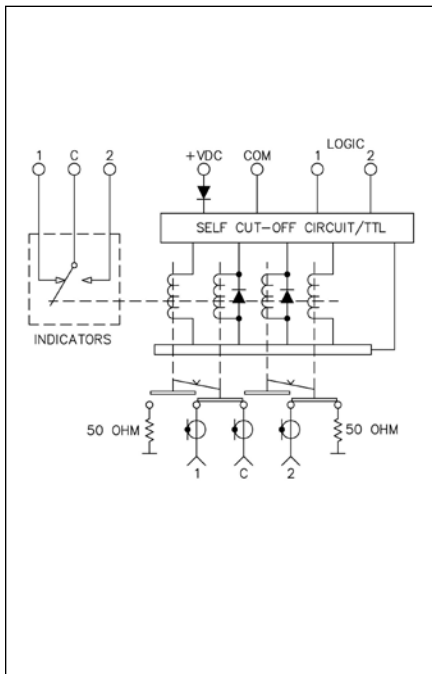
02 521U/521Y Failsafe TTL



03 521U/521Y Self Cutoff



04 521U/521Y Self Cutoff TTL



05 521U/521Y Logic Truth Table

FAILSAFE TTL - SCH #2

LOGIC TRUTH TABLE		
RF PATH	INDICATOR PATH	LOGIC INPUT
NC-COM	NC-COM	0
NO-COM	NO-COM	1

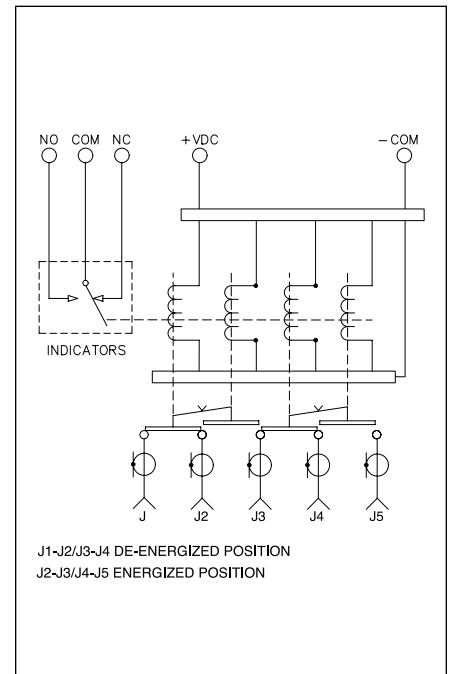
LOGIC HI (ON) 1 = 2.4-5.5Vdc
 LOGIC LOW (OFF) 0 = 0-0.8Vdc

SELF CUTOFF TTL - SCH #4

LOGIC TRUTH TABLE		
RF PATH	LOGIC INPUT "1"	LOGIC INPUT "2"
C-1	1	0
C-2	0	1

LOGIC HI (ON) = 2.4-5.5Vdc
 LOGIC LOW (OFF) = 0-0.8Vdc

06 521U Unterminated



J1-J2/J3-J4 DE-ENERGIZED POSITION
 J2-J3/J4-J5 ENERGIZED POSITION

Note: Diagram shown as Failsafe Unterminated. Consult with factory for other options.



- DC-6.5 GHz
- DC-12.4 GHz
- Ruggedized
- 100K Life Cycles

RF Characteristics

Frequency GHz	VSWR (max)	Isolation dB (min)	Ins. Loss dB (max)
DC-1	1.20	75	0.20
1-4	1.30	60	0.30
4-8	1.40	60	0.40
8-12.4	1.50	60	0.50

Note: RF Characteristics are for type N & TNC Female connectors. Consult Dow-Key for SC type connectors.

Specifications

Operating Voltage:

28 Vdc (20-30 Vdc)

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

28 Vdc 310 mA

Switching Time:

20 ms maximum

Operating Temperature:

-55 °C to +85°C

Mechanical Life Cycles:

100,000 minimum

Vibration, Operating:

20g's sine/random

Mechanical Shock, Non-Operating:

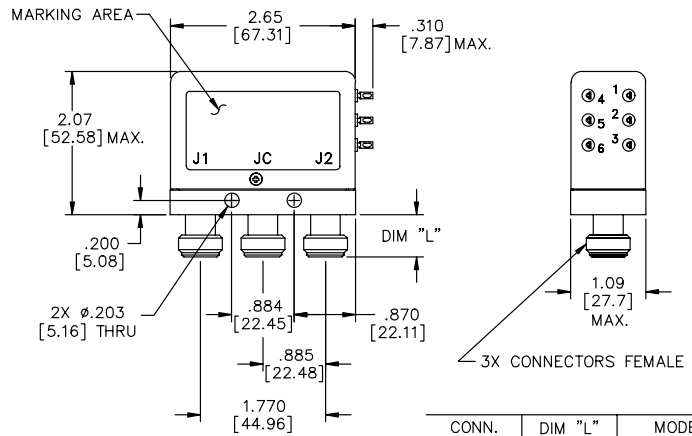
50G, 1/2 Sine, 11 ms

Nominal Weight*:

8.5 oz. (241 g.)

* Performance and weight varies depending on selected options.

Mechanical

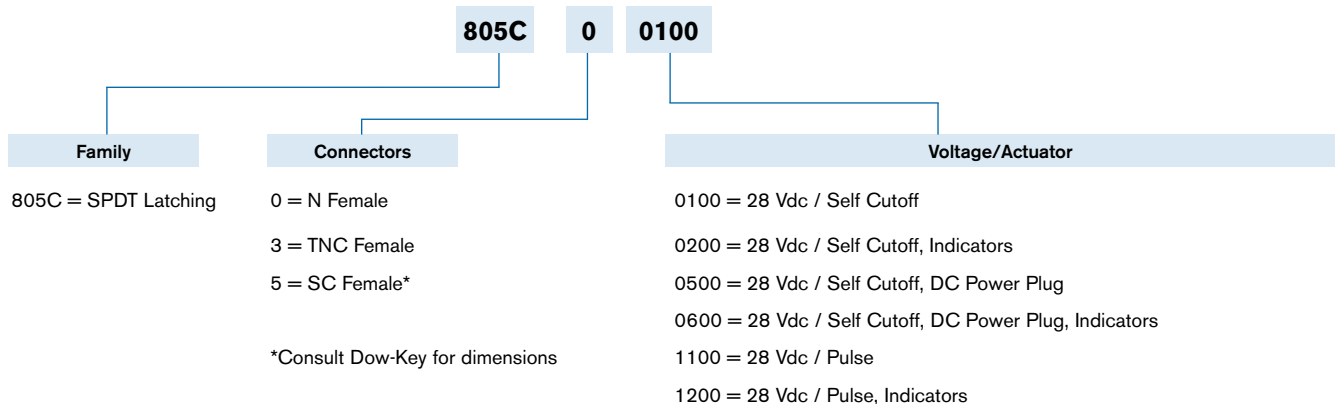


CONN.	DIM "L" (MAX)	MODEL	ELEC. SCHEM.
N CONN.	.60 [15.25]	805C00100	1
N CONN.	.60 [15.25]	805C00200	1
N CONN.	.60 [15.25]	805C01100	2
N CONN.	.60 [15.25]	805C01200	2
TNC CONN.	.56 [14.23]	805C30100	1
TNC CONN.	.56 [14.23]	805C30200	1
TNC CONN.	.56 [14.23]	805C31100	2
TNC CONN.	.56 [14.23]	805C31200	2

805C00200 Shown

For Electrical Schematic, see page # 1-17

Part Number Selector



*Consult Dow-Key for dimensions



- DC-6.5 GHz
- DC-12.4 GHz
- Ruggedized
- 100K Life Cycles

RF Characteristics

Frequency GHz	VSWR (max)	Isolation dB (min)	Ins. Loss dB (max)
DC-1	1.20	75	0.20
1-4	1.30	60	0.30
4-8	1.40	60	0.40
8-12.4	1.50	60	0.50

Note: RF Characteristics are for type N & TNC Female connectors. Consult Dow-Key for SC type connectors.

Specifications

Operating Voltage:

28 Vdc (20-30 Vdc)

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

28 Vdc 160 mA

Switching Time:

20 ms maximum

Operating Temperature:

-55 °C to +85°C

Mechanical Life Cycles:

100,000 minimum

Vibration, Operating:

20g's sine/random

Mechanical Shock, Non-Operating:

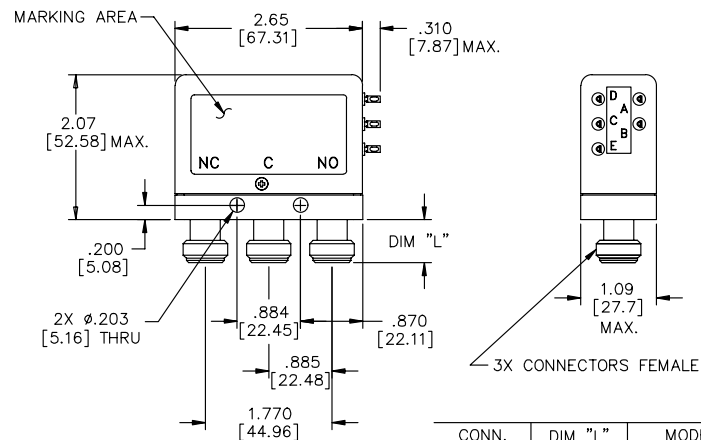
50G, 1/2 Sine, 11 ms

Nominal Weight*:

8.5 oz. (241 g.)

* Performance and weight varies depending on selected options.

Mechanical

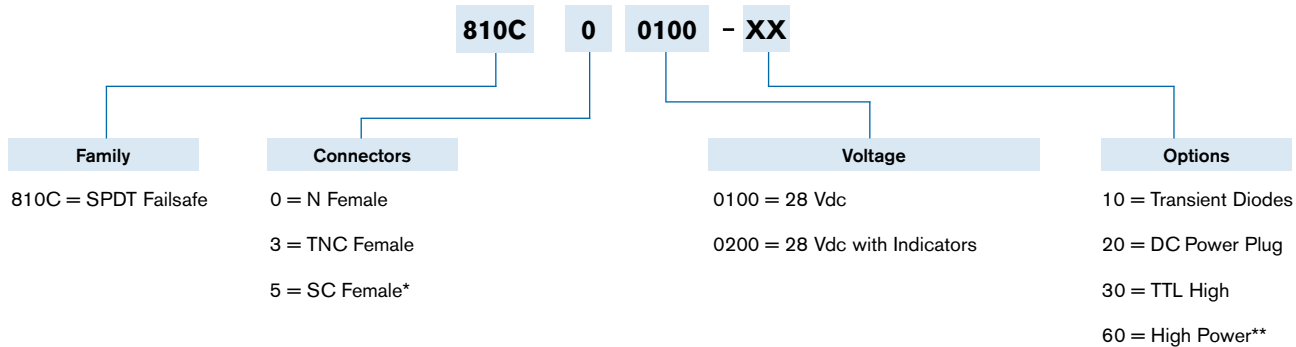


CONN.	DIM "L" (MAX)	MODEL	ELEC. SCHEM.
N CONN.	.60 [15.25]	810C00100	3
N CONN.	.60 [15.25]	810C00200	3
TNC CONN.	.56 [14.23]	810C30100	3
TNC CONN.	.56 [14.23]	810C30200	3

810C00200 Shown

For Electrical Schematic, see page # 1-17

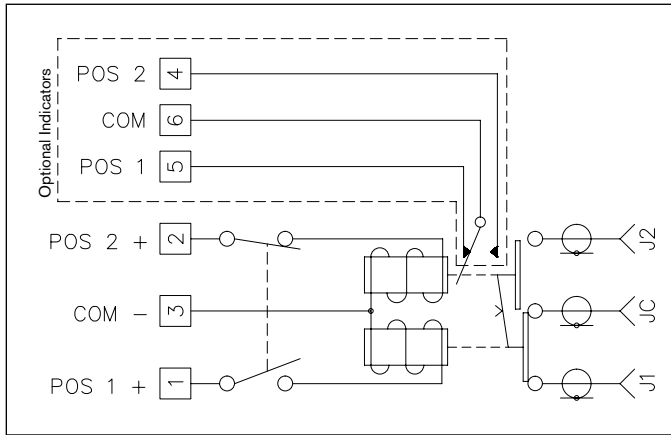
Part Number Selector



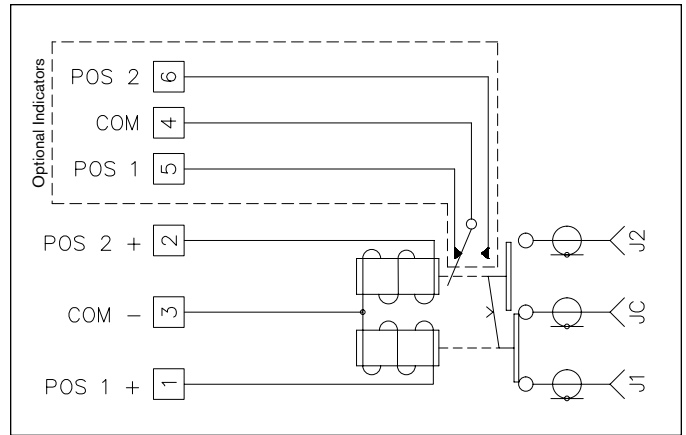
*Consult Dow-Key for dimensions

** See Power Chart on page # iii

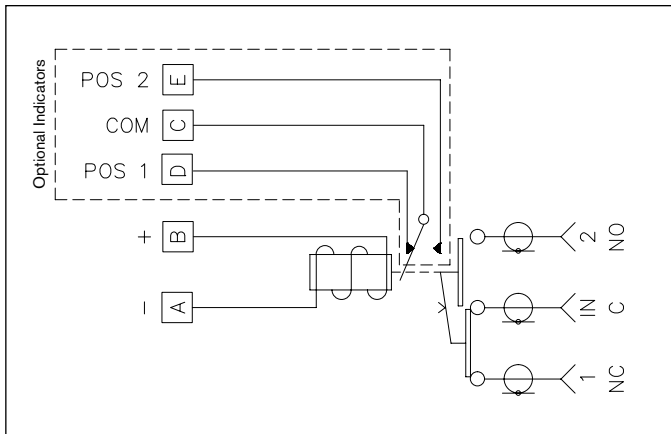
01 805 Self Cutoff



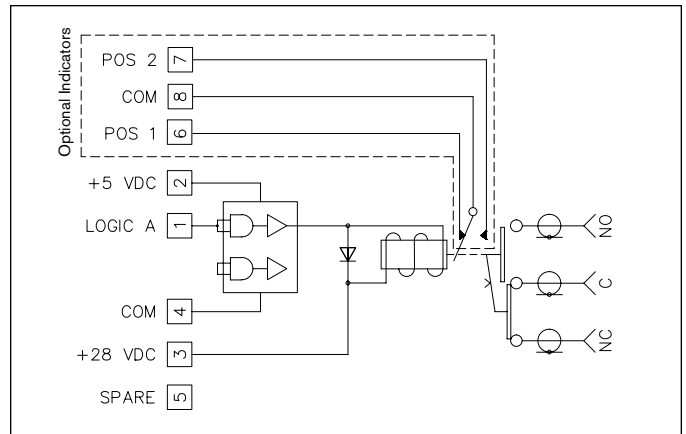
02 805 Pulse



03 810 Failsafe



04 810 Failsafe TTL





- DC-18 GHz
- Ruggedized
- 1M Life Cycles

RF Characteristics

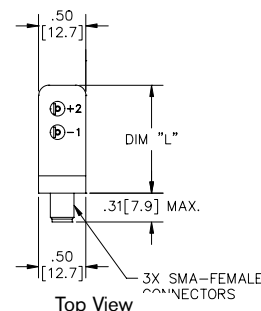
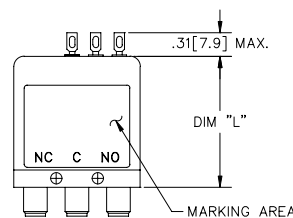
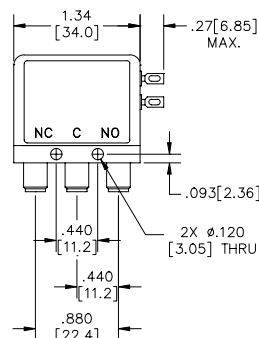
Frequency GHz	VSWR (max)	Isolation dB (min)	Ins. Loss dB (max)
DC-1	1.15	80	0.15
1-4	1.25	80	0.20
4-8	1.35	70	0.35
8-12.4	1.45	60	0.45
12.4-18	1.50	60	0.50

Specifications

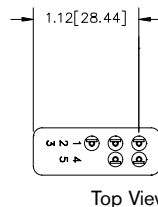
- Operating Voltage:**
28 Vdc (20-30 Vdc)
- Coil Current (max. @ nom. Vdc & 25 °C)*:**
28 Vdc 120 mA
- Switching Time:**
20 ms maximum
- Operating Temperature:**
-55 °C to +85°C
- Mechanical Life Cycles:**
1,000,000 minimum
- Vibration, Operating:**
20g's sine/random
- Mechanical Shock, Non-Operating:**
50G, 1/2 Sine, 11 ms
- Nominal Weight*:**
2.0 oz. (57 g.)

* Performance and weight varies depending on selected options.

Mechanical

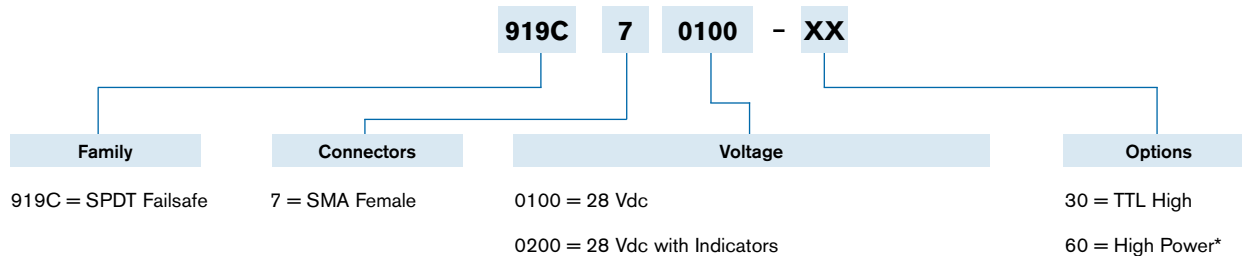


DIM "L" (MAX)	MODEL	ELEC. SCHEM.
1.15 [29.21]	919C70100	5
1.40 [35.6]	919C70200	5



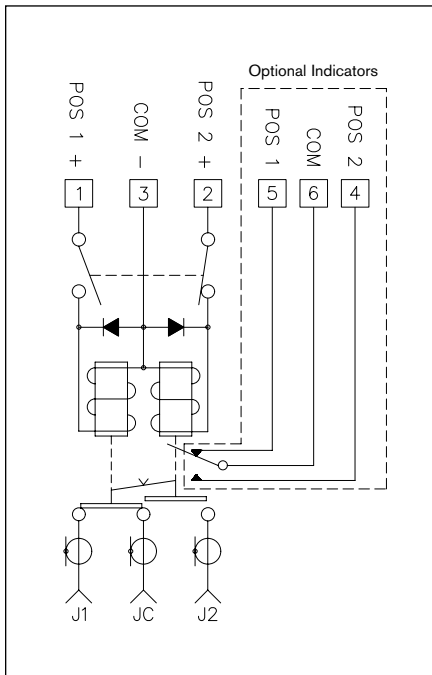
919C70200 Shown
For Electrical Schematic, see page # 1-20

Part Number Selector

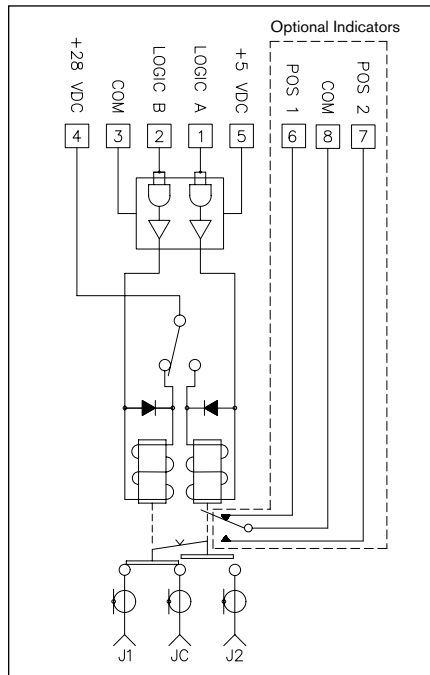


*See Power Chart on page # iii

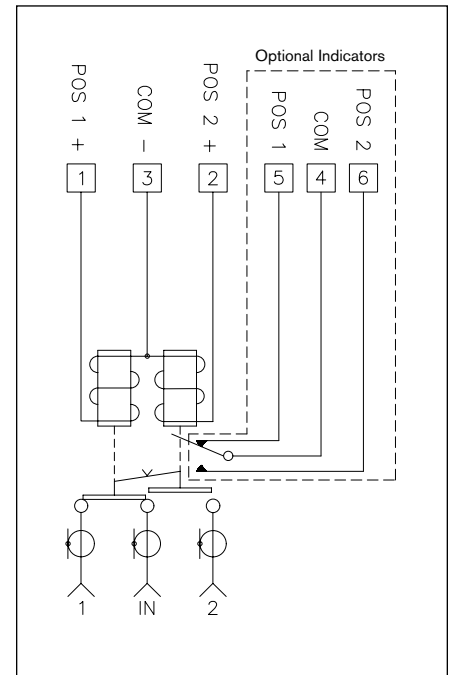
01 909 Self Cutoff



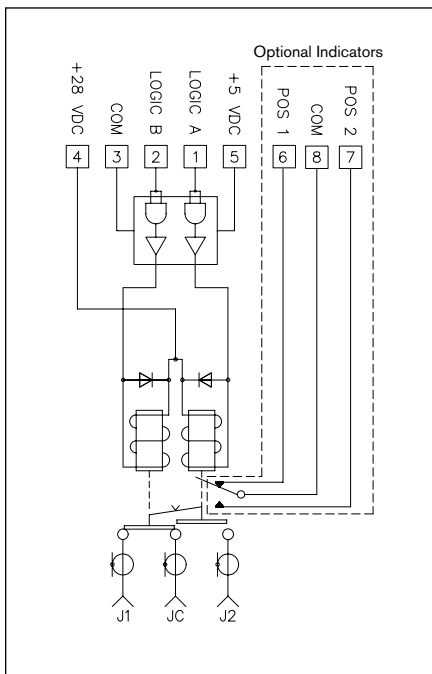
02 909 Self Cutoff TTL



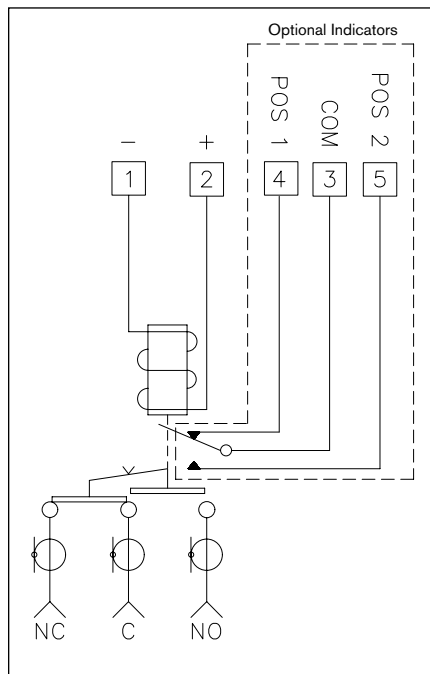
03 909 Pulse



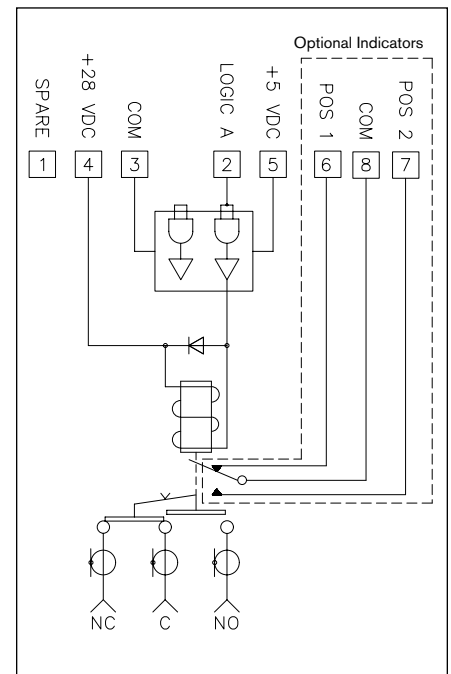
04 909 Pulse TTL



05 919 Failsafe



06 919 Failsafe TTL



RF Characteristics

Frequency GHz	VSWR (max)	Isolation dB (min)	Ins. Loss dB (max)
40S-S90802A-1			
10-500	1.40	50	0.50
500-1000	1.40	40	0.75
40S-S90802A-2			
800-2000	1.40	75	0.60
2000-3000	1.40	65	0.95
40S-S90802A-3			
20-1000	1.40	50	0.30
1000-2000	1.40	40	0.50
2000-2500	1.40	40	1.00



- 10-1000 MHz
- 20-2500 MHz
- 800-3000 MHz
- Solid State

Specifications

Operating Voltage:

5 Vdc (4.5-5.5 Vdc)
15 Vdc (12-15 Vdc)

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

40S-S90802A-1	40S-S90802A-3
5 Vdc 265 mA	5 Vdc 45 mA
15 Vdc 45 mA	15 Vdc 345 mA

40S-S90802A-2

5 Vdc 45 mA
15 Vdc 85 mA

Switching Time:

40S-S90802A-1	40S-S90802A-3
40 μs maximum	10 μs maximum

40S-S90802A-2

10 μs maximum

Temperature:

Operating: -20 °C to + 70 °C
Storage: -55 °C to + 85 °C

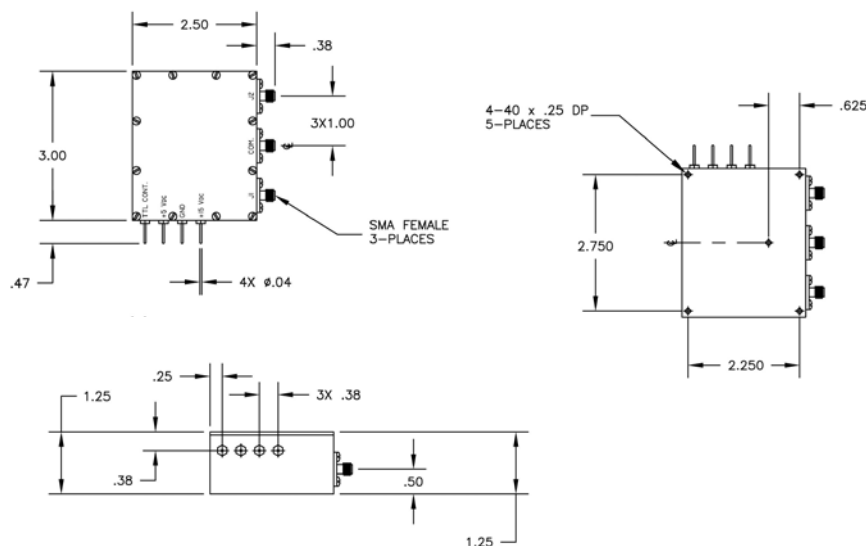
Vibration:

Operating: MIL-STD-202G, METHOD 214

Mechanical Shock:

Non-operating: 30 G, 11 ms

Mechanical



40S-S90802A Series shown

Part Number Selector

40S - S90802A - 1

Frequency

- 1 = 10-1000 MHz
- 2 = 800-3000 MHz
- 3 = 20-2500 MHz

Electrical Schematic

