

**RF Characteristics**



Frequency GHz	VSWR (max)	Isolation dB (min)	Ins. Loss dB (max)
0-1	1.15	85	0.15
1-2	1.20	80	0.20
2-4	1.25	70	0.25
4-8	1.45	60	0.40
8-12.4	1.50	60	0.50

Note: RF characteristics for Type N & TNC female connectors, consult Dow-Key for other connector configurations

**402 Series SPDT Failsafe with TTL & Indicator Option, N**

**Specifications**

**Operating Voltage:**

(across temperature range)  
 12 Vdc (11-14 Vdc)  
 28 Vdc (24-32 Vdc)

**Coil Current (max @ nom.Vdc & 20°C):**

12 Vdc 275 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:**

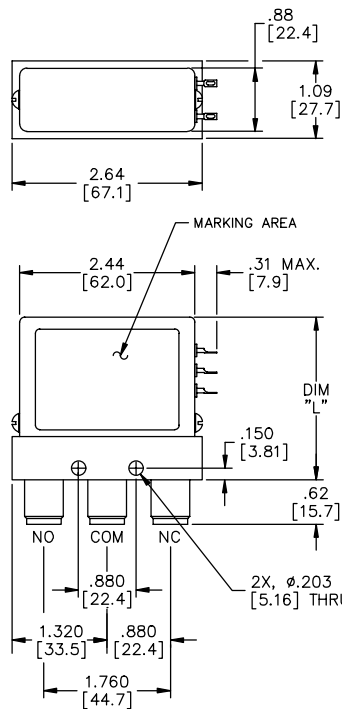
10G RMS, 20-2000 Hz

**Mechanical Shock, Non-Operating:**

50G, 1/2 Sine, 11mS

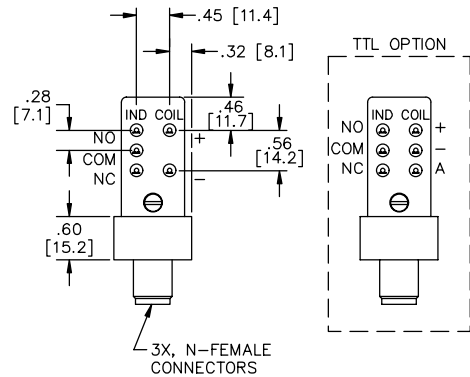
**Nominal Weight:**

9.0 oz., (260g.)



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

**Mechanical**



402-2X0132 Shown

**Part Number Selection**

For Electrical Schematic see page # 1-8

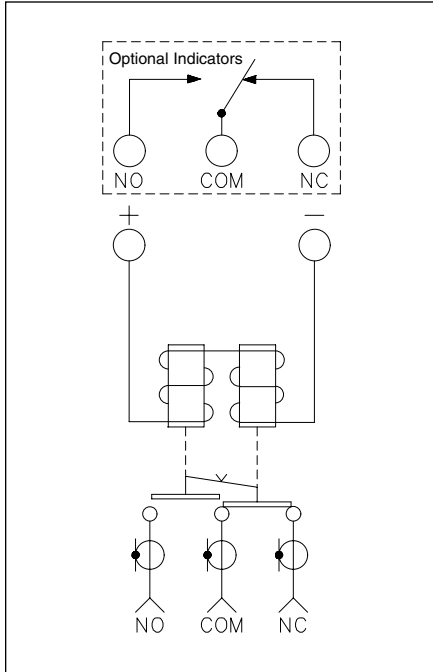
402 J - 2 2 01 02 A

Special Options	Actuator	Coil Voltage	Connectors	Indicators	Circuit Options
A = High Power J = 'D' Connector P = Power Connector T = -55°C to + 85°C	2 = Failsafe 6 = Failsafe with Suppression Diode	2 = 12Vdc 3 = 28Vdc 4 = 48Vdc 7 = 20Vdc 8 = 24Vdc 9 = 15Vdc	01 = N Female 02 = BNC Female 03 = TNC Female 53 = SC Female*	02 = No Indicators 32 = Indicators	A = TTL High B = JANTX TTL High L = TTL Low

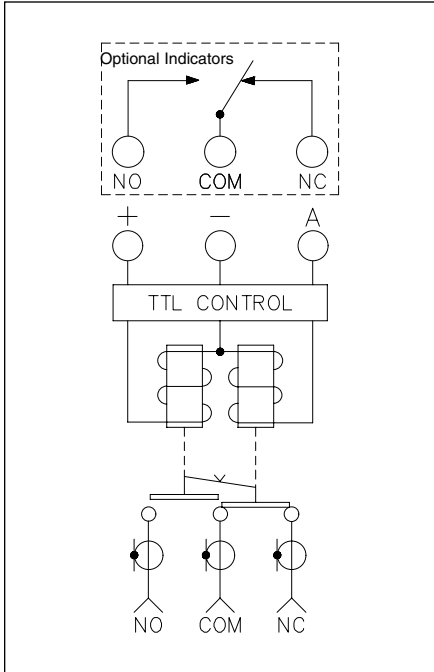
\*1" connector spacing  
 Consult Dow-Key for dimension



**1 402 Failsafe**



**2 402 Failsafe TTL**



**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

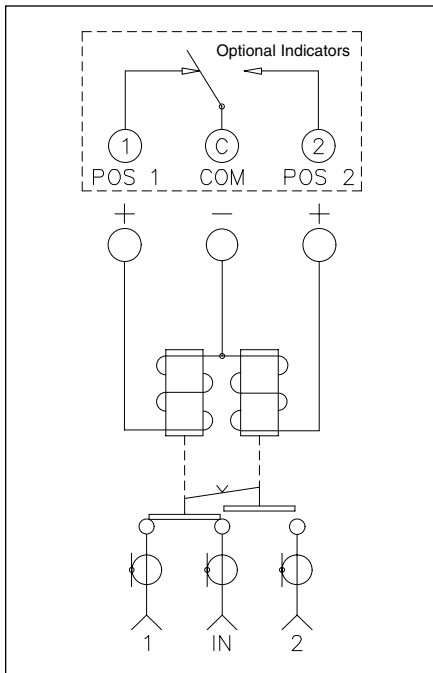
"0" = 0.0V-0.8V  
"1" = 2.4V-5.5V

*SELF CUTOFF TTL - SCH #5*

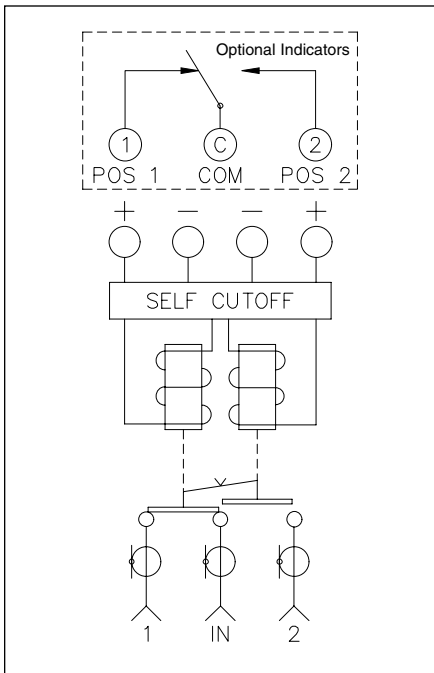
LOGIC TRUTH TABLE			
RF PATH	INDICATOR PATH	LOGIC INPUT "A"	LOGIC INPUT "B"
IN-1	COM-1	1	0
IN-2	COM-2	0	1

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

**3 402 Pulse Latch**



**4 402 Self Cutoff**



**5 402 Self Cutoff TTL**

