



The **D3 Series** features SMA connectors and a frequency range of DC to 22 GHz.

This series is available with fail-safe, latching self cut-off or pulse latching functions.

RF Impedance:	50 ohms nominal
Temperature Range:	-35°C to +85°C ambient
Operating Life:	1,000,000 cycles min.
Switching Time:	15 mSec max.
Switching Sequence:	Break Before Make
Environmental:	Designed in Accordance to MIL-DTL-3928 (Testing and Operation Modes)

SPECIFICATIONS

Frequency	VSWR (max.)	Insertion Loss (dB max.)	Isolation (dB min.)
DC-3 GHz	1.20	0.20	80
3-8 GHz	1.30	0.30	70
8-12.4 GHz	1.40	0.40	60
12.4-18 GHz	1.50	0.50	60
18-22 GHz	1.60	0.60	55

Actuator Current (typical)	12Vdc	12-15 Vdc	20-24 Vdc	24-30Vdc
Fail-safe	240mA	240mA	170mA	140mA
Latching	140mA	140mA	90mA	90mA

* If reduced coil current is required, please contact Factory.

AVAILABLE OPTIONS

OPTION 2 RF CONNECTORS	OPTION 4 VOLTAGE	OPTION 5 ACTUATOR	OPTION 6 FREQUENCY	OPTION 8 SPECIAL OPTIONS
4 - SMA	1 - 6 Vdc +/- 10% 2 - 12 Vdc +/- 10% 3 - 24-30 Vdc 4 - 48 Vdc +/- 10% 5 - 110 Vac +/- 10% 6 - 12-15 Vdc 7 - 18-20 Vdc 8 - 20-24 Vdc	Fail-safe A - Standard B - Indicators M - Diodes Q - Diodes, Indicators Latching Self Cut-Off D - Diodes E - Diodes, Indicators Pulse Latching C - Standard F - Indicators Y - Diodes L - Diodes, Indicators Normally Open K - Standard H - Indicators J - Diodes G - Diodes, Indicators	5 - DC to 22 GHz OPTION 7 POLARITY 0 - Not Applicable 8 - Positive Common 9 - Negative Common	L - TTL (High) LL - TTL (Low)
OPTION 3 TERMINALS 1 - Solder Terminals 4 - Sub M Miniature D-Shell Connector				

D3

-

4

5

Option 1
Series

Option 2
RF Connectors

Option 3
Terminals

Option 4
Voltage

Option 5
Actuator

Option 6
Frequency

Option 7
Polarity

Option 8
Special
Options

DC TERMINAL FUNCTION

	FAILSAFE					LATCHING							NORMALLY OPEN							
PIN	A	M	A, M w/ TTL	B	Q	B, Q w/ TTL	C, Y	C, Y w/ TTL	D	D w/ TTL	E	E w/ TTL	F, L	F, L w/ TTL	J	K	J, K w/ TTL	G	H	G, H w/ TTL
1	N/A	N/A	2	2	2	2	2-/+	N/A	2-/+	N/A	2	2	2	2	2-/+	2	N/A	2	2	2
2	N/A	N/A	-B	1	1	1	1-/+	2	1-/+	2	1	1	1	1	1-/+	1	2	1	1	1
3	N/A	N/A	+A	COM	COM	COM	COM+/-	-B	COM+/-	-B	COM	COM	COM	COM	COM+/-	COM	-B	COM	COM	COM
4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2	N/A	2	N/A	N/A	N/A	N/A	N/A	2
5	N/A	N/A	N/A	N/A	N/A	2	N/A	N/A	N/A	N/A	2-/+	1	2-/+	1	N/A	N/A	N/A	2-/+	2	1
6	N/A	N/A	N/A	2	-2	-B	N/A	1	N/A	1	1-/+	-B	1-/+	-B	N/A	N/A	1	1-/+	1	-B
7	N/A	N/A	N/A	1	+1	+A	N/A	+A	N/A	+A	COM+/-	+A	COM+/-	+A	N/A	N/A	+A	COM+/-	COM	+A
8	1	+1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9	2	-2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

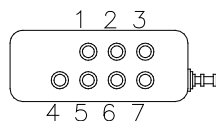
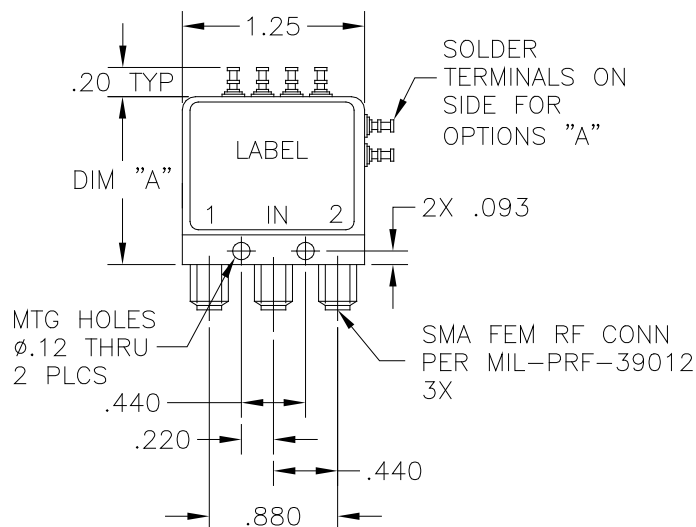
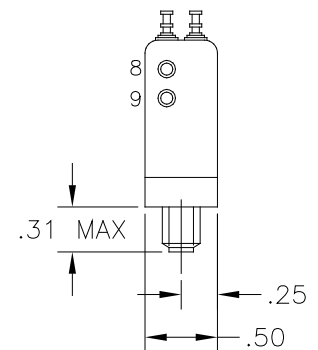
SCHEMATICS

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FIG.	1	1	2	1	1	2	15	16	9	10	9	10	15	16	21	21	22	21	21	22
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OUTLINE DRAWING DIMENSION "A"

1.15"	1.15"	1.88"	1.68"	1.68"	1.88"	1.38"	1.88"	1.58"	1.88"	1.58"	1.88"	1.58"	1.88"	1.68"	1.68"	1.88"	1.68"	1.68"	1.88"
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TOP VIEW

FRONT VIEW

SIDE VIEW


**D3 SERIES: SPDT 50 OHM
TERMINATED SWITCH
DC-22 GHz ◆ SMA**

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8-12.4 GHz	1.40	0.40	60
12.4-18 GHz	1.50	0.50	60
18-22 GHz	1.60	0.60	55

Actuator Current (typical)	12Vdc	12-15 Vdc	20-24 Vdc	24-30Vdc
Fail-safe	480mA	600mA	400mA	280mA
Latching	282mA	353mA	218mA	175mA

* If reduced coil current is required, please contact Factory.

AVAILABLE OPTIONS

OPTION 2 RF CONNECTORS	OPTION 4 VOLTAGE	OPTION 5 ACTUATOR	OPTION 6 FREQUENCY	OPTION 8 SPECIAL OPTIONS
4 - SMA	1 - 6 Vdc +/- 10% 2 - 12 Vdc +/- 10% 3 - 24-30 Vdc 4 - 48 Vdc +/- 10% 5 - 110 Vac +/- 10% 6 - 12-15 Vdc 7 - 18-20 Vdc 8 - 20-24 Vdc	Fail-safe A - Standard B - Indicators M - Diodes Q - Diodes, Indicators Latching Self Cut-Off D - Diodes E - Diodes, Indicators Pulse Latching C - Standard F - Indicators Y - Diodes L - Diodes, Indicators Normally Open K - Standard H - Indicators J - Diodes G - Diodes, Indicators	5 - DC to 22 GHz OPTION 7 POLARITY 0 - Not Applicable 8 - Positive Common 9 - Negative Common	L - TTL (High) LL - TTL (Low) T - External Termination OT - Internal Termination
OPTION 3 TERMINALS 1 - Solder Terminals 4 - Sub M iniature D-Shell Connector				

D3	-	4			5		
Option 1 Series	Option 2 RF Connectors	Option 3 Terminals	Option 4 Voltage	Option 5 Actuator	Option 6 Frequency	Option 7 Polarity	Option 8 Special Options

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DC TERMINAL FUNCTION

PIN	FAILSAFE					LATCHING										NORMALLY OPEN				
	A	M	A, M w/ TTL	B	Q	B, Q w/ TTL	C, Y	C, Y w/ TTL	D	D w/ TTL	E	E w/ TTL	F, L	F, L w/ TTL	J	K	J, K w/ TTL	G	H	G, H w/ TTL
1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2	N/A	2	N/A	2	N/A	2	N/A	N/A	2	N/A	N/A	2
2	N/A	N/A	2	2	2	2	2-/+	1	2-/+	1	2-/+	1	2-/+	1	2-/+	2	1	2-/+	2	1
3	1	+1	-B	1	1	-B	1-/+	-B	1-/+	-B	1-/+	-B	1-/+	-B	1-/+	1	-B	1-/+	1	-B
4	2	-2	+A	COM	COM	+A	COM+/-	+A	COM+/-	+A	COM+/-	+A	COM+/-	+A	COM+/-	COM	+A	COM+/-	COM	+A
5	N/A	N/A	N/A	N/A	N/A	2	N/A	N/A	N/A	N/A	2	2	2	2	N/A	N/A	N/A	2	2	2
6	N/A	N/A	N/A	2	-2	1	N/A	N/A	N/A	N/A	1	1	1	1	N/A	N/A	N/A	1	1	1
7	N/A	N/A	N/A	1	+1	COM	N/A	N/A	N/A	N/A	COM	COM	COM	COM	N/A	N/A	N/A	COM	COM	COM

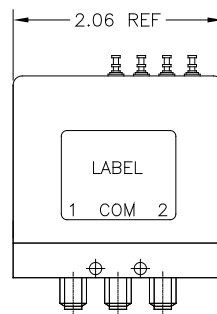
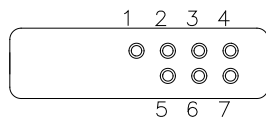
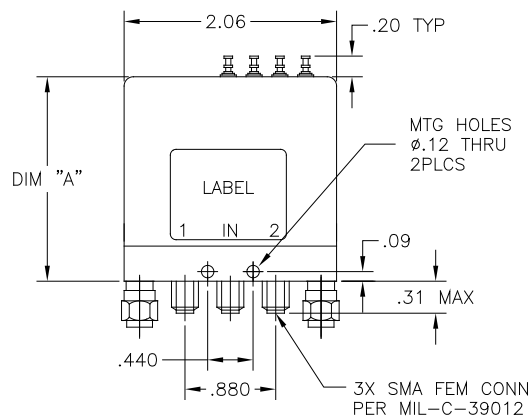
SCHEMATICS

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FIG.	5	5	6	5	5	6	17	18	11	12	11	12	17	18	23	23	24	23	23	24
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OUTLINE DRAWING DIMENSION "A"

1.98"	1.98"	1.98"	1.98"	1.98"	1.98"	1.98"	1.98"	1.98"	1.98"	1.98"	1.98"	1.98"	1.98"	1.98"	1.98"	1.98"	1.98"	1.98"	1.98"	1.98"
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**FRONT VIEW
Internal Terminations**

TOP VIEW

**FRONT VIEW
External Terminations**

SIDE VIEW
