# N SERIES 1P9T to 1P10T MULTI POSITION 50 OHM TERMINATED SWITCH DC-10.5 GHz ◆ SMA



# Ducommun



The *N Series* features SMA connectors and a frequency range of DC to 10.5 GHz.

This series is available with latching self cut-off or normally open functions with terminations.

RF Impedance: Temperature Range: Operating Life: Switching Time: Switching Sequence: Environmental: 50 ohms nominal -35°C to +85°C ambient 1,000,000 cycles min. 15 mSec max. Break Before Make 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	1.40	0.40	70
8-10.5 GHz	1.50	0.50	60

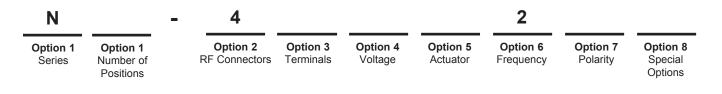
Actuator Current				
(typical)	12Vdc	12-15 Vdc	20-24 Vdc	24-30Vdc
Normally Open	240mA	300mA	200mA	140mA
Latching	280mA	353mA	218mA	175mA
* If reduced coil current is requ	ired please conta	ct Factory		

#### 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%		Latching Self Cut-Off	2 -	DC to 10.5 GHz	L-	TTL (High)
	2 -	12 Vdc +/- 10%	D -	Diodes (USB Optional)			LL -	TTL (Low)
		(USB Optional)	E -	Diodes, Indicators			1-	Bracket
OPTION 3	3 -	24-30 Vdc		(USB Optional)		OPTION 7	F-	Flange
TERMINALS	4 -	48 Vdc +/- 10%		Normally Open		POLARITY	P -	High Power Handling
1 - Solder	5 -	110 Vac +/- 10%	G -	Diodes, Indicators	0 -	Not Applicable, USB	R -	Reset (Latching Only)
Terminals	6 -	12-15 Vdc		(USB Optional)	8 -	Positive Common	С-	BCD
2 - Circular Connector		(USB Optional)	н-	Indicators (USB Optional)	9 -	Negative Common	Т-	Terminated
4 - Sub Miniature	7 -	18-20 Vdc	J-	Diodes			U -	USB
D-Shell	8 -	20-24 Vdc	к-	Standard				
Connector								
5 - USB								

Please Note: USB integration can only be applied to Voltage Options 12Vdc, & 15Vdc, Polarity Option # 3, and Terminals Option # 3.

The switch has a mini-USB socket on the enclosure interface which provides communication between switch and computers. Additionally, the enclosure also has a Molex socket for 12Vdc connection, which is required to power RF switch. The switch is accompanied with a CD driver, a 3 ft. USB cable and a 12 Vdc AC/DC adapter.



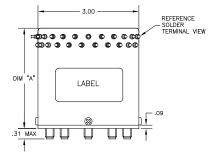
High quality microwave and millimeter wave components and subsystems. Visit Ducommun RF Products online at www.ducommun.com or contact us at 310.513.7200. All specifications are subject to change without notice.



# **N SERIES 1P9T to 1P10T MULTI POSITION 50 OHM TERMINATED SWITCH** DC-10.5 GHz SMA

DC TERMINAL FUNCTION										
		LATC	HING				NORMAL	LY OPEN		
	D	D	E	E			J, K		н	G, H
PIN		w/ TTL		w/ TTL	J	К	w/ TTL	G		w/ TTL
1	NOTE #1	NOTE #1	NOTE #1	NOTE #1	N/A	N/A	N/A	N/A	N/A	N/A
2	COM+/-	+A	COM+/-	+A	COM+/-	COM	+A	COM+/-	COM	+A
3	1-/+	-В	1-/+	-B	1-/+	1	-В	1-/+	1	-B
4	2-/+	1	2-/+	1	2-/+	2	1	2-/+	2	1
5	3-/+	2	3-/+	2	3-/+	3	2	3-/+	3	2
6	4-/+	3	4-/+	3	4-/+	4	3	4-/+	4	3
7	5-/+	4	5-/+	4	5-/+	5	4	5-/+	5	4
8	6-/+	5	6-/+	5	6-/+	6	5	6-/+	6	5
9	7-/+	6	7-/+	6	7-/+	7	6	7-/+	7	6
10	8-/+	7	8-/+	7	8-/+	8	7	8-/+	8	7
11	9-/+	8	9-/+	8	9-/+	9	8	9-/+	9	8
12	10-/+	9	10-/+	9	10-/+	10	9	10-/+	10	9
13	N/A	10	N/A	10	N/A	N/A	10	N/A	N/A	10
Α	N/A	N/A	COM	COM	N/A	N/A	N/A	COM	COM	COM
в	N/A	N/A	1	1	N/A	N/A	N/A	1	1	1
С	N/A	N/A	2	2	N/A	N/A	N/A	2	2	2
D	N/A	N/A	3	3	N/A	N/A	N/A	3	3	3
E	N/A	N/A	4	4	N/A	N/A	N/A	4	4	4
F	N/A	N/A	5	5	N/A	N/A	N/A	5	5	5
G	N/A	N/A	6	6	N/A	N/A	N/A	6	6	6
н	N/A	N/A	7	7	N/A	N/A	N/A	7	7	7
1	N/A	N/A	8	8	N/A	N/A	N/A	8	8	8
J	N/A	N/A	9	9	N/A	N/A	N/A	9	9	9
к	N/A	N/A	10	10	N/A	N/A	N/A	10	10	10
NOTE#	NOTE#1: RESET IF (R) OPTION IS SELECTED, OTHERWISE N/A									

## **FRONT VIEW**



## **DC TERMINAL VIEW**

HERWISE N/A

SCHEMATICS

Pages 139-143										
FIG.	25	26	25	26	29	29	30	29	29	30

OUTLINE DRAWING DIMENSION "A"										
	2.60"	2.98"	2.60"	2.98"	2.10"	2.10"	2.36"	2.10"	2.10"	2.36"

### **BOTTOM VIEW**

