

COAXIAL SPnT up to 40 GHz – RAMSES Concept

R57

Models

- 3** : Without 50 Ω termination
4 : With 50 Ω termination

Connector RF

- 3** : SMA up to 3 GHz
4 : SMA up to 18 GHz
7 : SMA 2.9 up to 26.5 GHz (4)
8 : SMA 2.9 up to 40 GHz (4)
9 : DIN 1.6/5.6 up to 1 GHz (4)

Type

- 0** : Normally open
1 : Normally open + I.C.
2 : Latching
3 : Latching + I.C.
4 : Latching + S. C. O.(1)(4)
5 : Latching + S. C. O. + I.C.(1)(4)
8 : Latching + S. C. O. +A.R.(1)
9 : Latching + S. C. O.+ I.C.+ A.R. (1)

Actuator voltage (2)

- 2** : 12 Vdc
3 : 28 Vdc

Actuator terminal

- 0** : Solder Pins
5 : DSUB

Options

- 0** : Without option
1 : Positive common (2)
2 : Compatible TTL driver(1)
3 : With suppression diodes
4 : With suppression diodes and positive common (2)
8 : BCD driver TTLcompatible(1)(3)

Number of positions

- 3** : 3 Positions
4 : 4 Positions
5 : 5 Positions
6 : 6 Positions
7 : 7 Positions
8 : 8 Positions
9 : 9 Positions
0 : 10 Positions
1 : 11 Positions
2 : 12 Positions

I.C. : Indicator contact.
S.C.O. : Self Cut Off
A.R. : Automatic Reset

- (1)** : These models are already equipped with suppression diodes.
(2) : Standard products are equipped with common minus.
(3) : Latching BCD driver enables also a manual reset through driver code 0000.
(4) : Available only up to 6 positions, and without 50 Ohms termination

- Latching models have a RESET pin which commands the reset of all positions. This command should be used before switching from one position to another. If not, two positions will be set at the same time.

Note: During the RESET operation the current is : Setting current x number of positions.

- Latching models with AUTOMATIC RESET are available; these products have an internal SET/RESET circuit which automatically set the desired position and reset the non-selected positions. This option simplifies the use of latching switches by suppressing the RESET command in switching sequence.

For example: During the AUTOMATIC RESET operation, a 28V, 4 positions switch has temporarily a consumption of 250 mA, during 40 ms maximum only.

AVAILABILITY OF OPTIONS ACCORDING TO BOTH TYPE AND NUMBER OF POSITIONS

Type	Number of positions	Available options
0 or 1	3 to 12	0 - 1 - 2 - 3 - 4 - 8
2 or 3	3 to 6	0 - 1 - 2 - 3 - 4
	7 to 12	0 - 1 - 3 - 4
4 or 5	3 to 6	0 - 2
	7 to 12	Not Available
8 or 9	3 to 12	0 - 2 - 8

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GENERAL SPECIFICATIONS - RF PERFORMANCES

Connectors	SMA								
Number of positions	3 to 6				7 and 8				
Frequency range GHz	DC-3 / DC - 18				DC-3 / DC - 18				
	DC- 3	3 - 8	8 -12.4	12.4-18	DC- 3	3 - 8	8 -12.4	12.4-16	16-18
V.S.W.R. (max)	1.20	1.30	1.40	1.50	1.20	1.30	1.40	1.50	1.60
Insertion Loss (max) dB	.20	.30	.40	.50	.20	.30	.40	.55	.60
Isolation (min) dB	80	70	60	60	80	70	60	60	60

Connectors	SMA							
Number of positions	9 and 10					11 and 12		
Frequency range GHz	DC - 3 / DC - 18					DC-3 / DC - 12.4		
	DC - 3	3 - 8	8 -12.4	12.4-15.5	15.5-18	DC - 3	3 - 8	8 -12.4
V.S.W.R. (max)	1.20	1.30	1.40	1.50	1.70	1.20	1.40	1.80
Insertion Loss (max) dB	.20	.30	.40	.50	.70	.20	.35	.70
Isolation (min) dB	80	70	60	60	55	80	70	60

Connectors	DIN1.6 / 5.6		SMA 2.9				
Number of positions	3 to 6		3 to 6				
Frequency range GHz	DC - 1		DC - 26.5 / DC - 40				
	DC - 0.5	0.5 - 1	DC - 6	6 - 12.4	12.4 - 18	18 - 26.5	26.5-40
V.S.W.R. (max)	1.25	1.30	1.30	1.40	1.50	1.70	2.20
Insertion Loss (max) dB	.15	.20	.20	.40	.50	.70	1.10
Isolation (min) dB	90	80	70	60	60	55	50

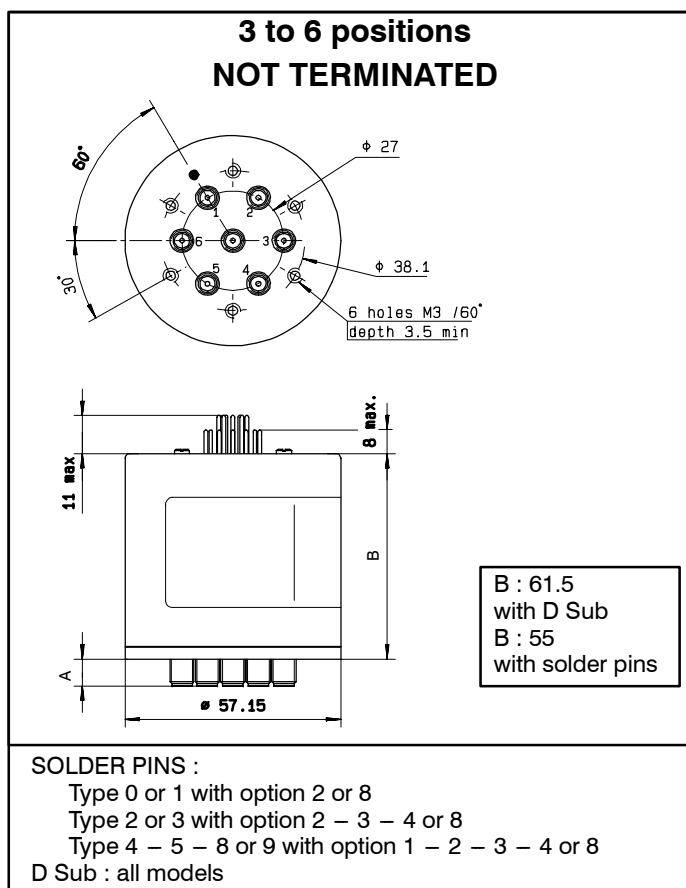
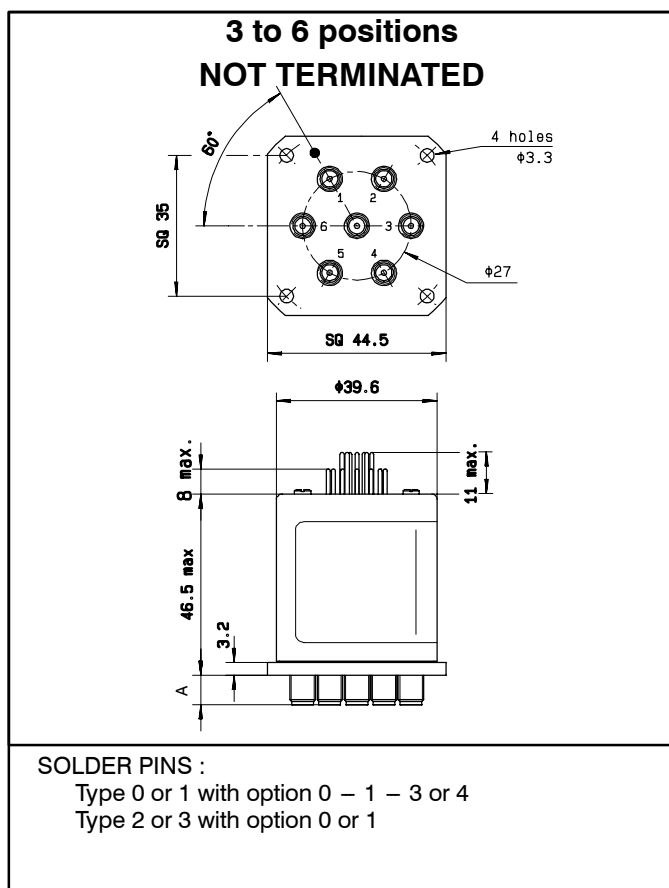
GENERAL SPECIFICATIONS - ADDITIONAL SPECIFICATIONS

Operating mode		Normally open or Latching			
		Normally open		Latching	
Actuator voltage (nominal)	Vdc	12	28	12	28
Operating current at 23°C	mA	250	102	See table page 49	
Average power		See Power Rating Chart page 9			
Peak power		kW1.5 (1 μs, 1 ‰)			
TTL INPUT		High level Low level2.2 to 5.5 V (TTL option) / 3.5 to 5.5 (BCD option) 0 to 0.8 V (TTL option) / 0 to 1.5 V (BCD option)			
Indicator rating		1 W - 30 V - 100 mA			
Switching time (max)		ms15 (for automatic reset models, SP3T to SP6T: 40 ms, SP7T to SP12T: 50 ms)			
Life			SMA	SMA 2.9 / 1.6/5.6	
		R573 serie	5 10 ⁶ cycles per way	2 10 ⁶ cycles per way	
		R574 serie	2 10 ⁶ cycles per way		
		2 10 ⁶ cycles per way			
Connectors		SMA , SMA 2.9 or 1.6/5.6			
Actuator terminals		Solder pins or DSUB			
Operating temperature range		°C-40, +85 (SMA & SMA 2.9) / -25,+70 (DIN1.6/5.6)			
Storage temperature range		°C-55, +85 (SMA & SMA 2.9) / -40 , +85 (DIN1.6/5.6)			
Impedance		SMA & SMA 2.9		DIN 1.6/5.6	
		50		75	
For terminated models		50 Ω termination ±5% 1 Watt per termination 3 W total power handling per switch			
Switching sequence		Break Before Make			

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TYPICAL OUTLINE DRAWING



Connectors	SMA	SMA 2.9	DIN 1.6/5.6
A max (mm)	7.4	6.3	11.5

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Radial:

R574302285	R574333315	R574312600	R574323600	R574392305	R574392680	R574393405	R574393505
R574312500	R574383600	R574302985	R574383825	R574393205	R574393600	R574393300	R574312430
R574392500	R574393305	R574312410	R574392725	R574312420	R574313820	R574302325	R574393425
R574393420	R574312520	R574393225	R574383400	R574313800	R574313330	R574302610	R574302905
R574383605	R574322605	R574313205	R574383500	R574313430	R574333235	R574393625	R574312320
R574332520	R574322410	R573393005	R573493880	R573933420	R573493220	R573812320	R573933600
R574402700	R574422805	R574493220	R574493585	R574433045	R574482625	R573482820	R573803645
R574482885	R573302285	R573302300	R573303630	R573322320	R573412420	R573882600	R574412420
R574433345	R573303830	R573413410	R573303425	R573392300	R573343600	R573413800	R574432230
R574432300	R573302325	R573402225	R573413725	R573823310	R573933620	R574412325	R573383680
R573312230	R573402820	R573452625	R573493425	R573813610	R573933400	R574312625	R574313615
R574413000	R574432420	R573412000	R574403445	R574493020	R573302085	R573302885	R573323100
R573413010	R574313315	R574402285	R574433030				