

## DPDT up to 12.4 GHz - Ramses Concept

N - BNC - TNC



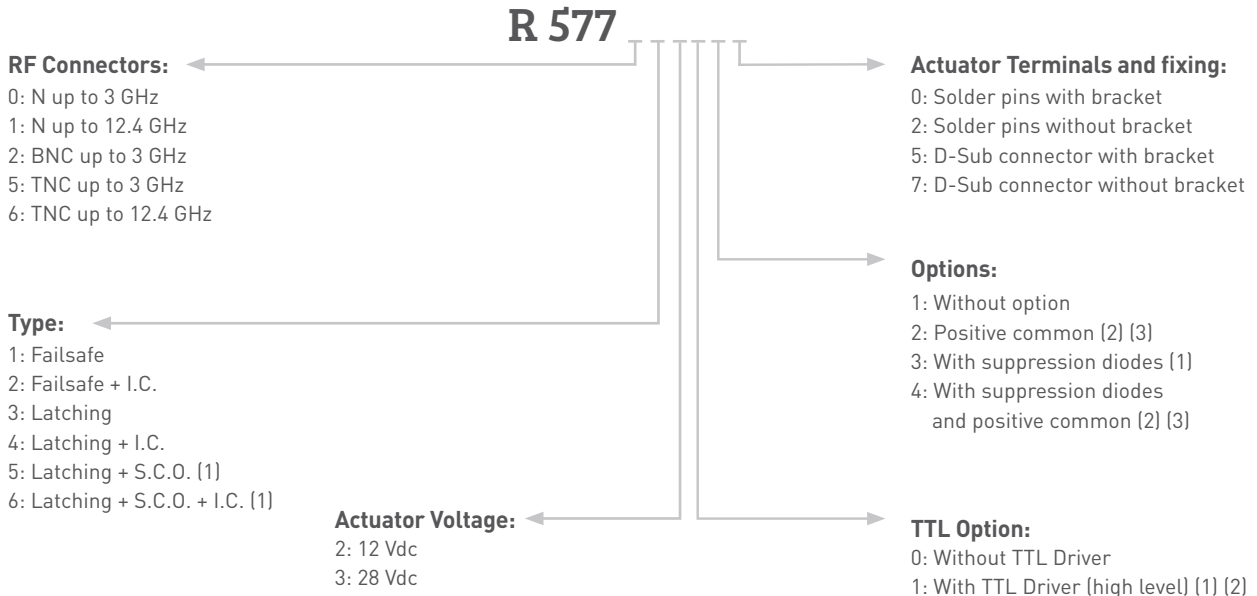
Radiall's DPDT switches offer excellent reliability, high performance and operating frequencies from DC to 12.4 GHz. Radiall's RAMSES concept guarantees a life span of 2.5 million cycles and provides a full array of options to respond to the needs of our customers.

These relays are well suited for applications across all markets including: Defense, Instrumentation, and Telecom.

Example of P/N:

R577122030 is a DPDT N 12.4 GHz, failsafe with Indicators, 12 Vdc, suppression diodes, solder pins with bracket.

### PART NUMBER SELECTION



I.C.: Indicator contact - S.C.O.: Self Cut-Off

- 1: Suppression diodes are already included in self cut-off & TTL option
- 2: Polarity is not relevant to application for switches with TTL driver
- 3: Positive common shall be specified only with type 3,4,5 & 6 because failsafe switches can be used with both polarities

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**GENERAL SPECIFICATIONS**

Operating mode		Failsafe		Latching	
Nominal operating voltage (across operating temperature)	Vdc	12 (10.2 / 13)	28 (24 / 30)	12 (10.2 / 13)	28 (24 / 30)
Coil resistance (+/-10%)	Ω	35	200	38	225
Nominal operating current at 23°C	mA	340	140	320	125
Average power		See Power Rating Chart page <b>1-13</b>			
TTL input	High Level	2.2 to 5.5 Volts			
	Low Level	0 to 0.8 Volts			
Switching time (Max)	ms	15			
Life		2.5 million cycles			
Connectors		N - BNC - TNC			
Actuator terminals		Solder pins or male 9 pin D-Sub connector			
Operating temperature range		-40°C to +85°C			
Storage temperature range		-55°C to +85°C			
Vibration (MIL STD 202, Method 204D, cond. C)		10-2000 Hz, 10g		operating	
Shock (MIL STD 202, Method 213B, cond. G)		50g / 11 ms, ½ sine		operating	

**RF PERFORMANCES**

Connectors	Frequency Range GHz		V.S.W.R. (max)	Insertion Loss (max) dB	Isolation (min) dB	Impedance Ω
BNC	DC - 3	DC - 1	1.15	0.15	85	50
		1 - 2	1.20	0.20	80	
		2 - 3	1.25	0.25	75	
N - TNC	DC - 3 DC - 12.4	DC - 1	1.15	0.15	85	
		1 - 2	1.20	0.20	80	
		2 - 3	1.25	0.25	75	
		3 - 8	1.35	0.35	70	
		8 - 12.4	1.50	0.50	60	

See page 4-8 for typical RF performances

Our Most Important Connection is with You.™

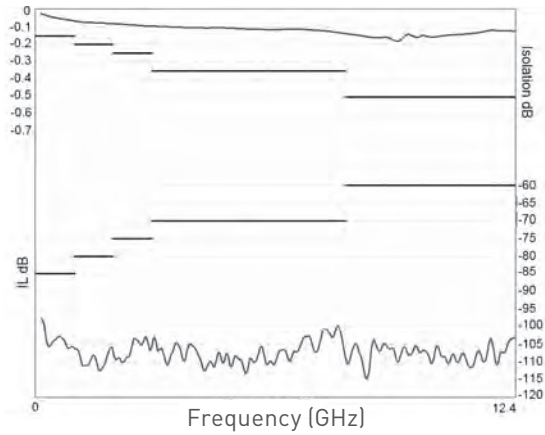
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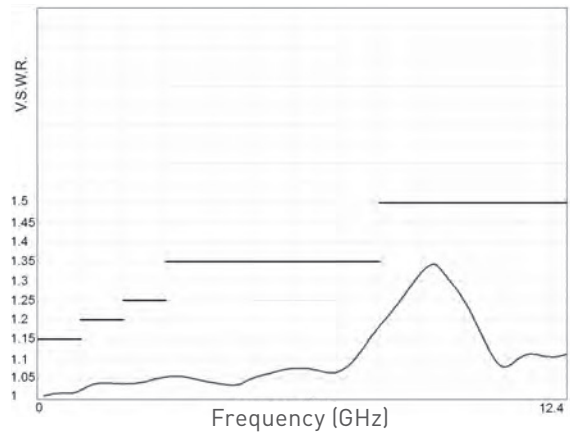
**R577 TYPICAL RF PERFORMANCES**

Example: DPDT N/TNC up to 12.4 GHz

**Insertion Loss and Isolation**

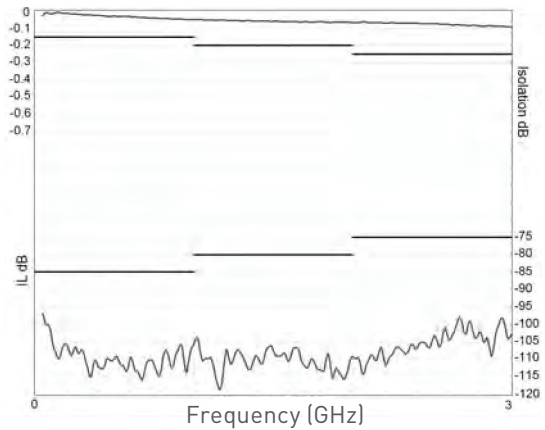


**V.S.W.R.**

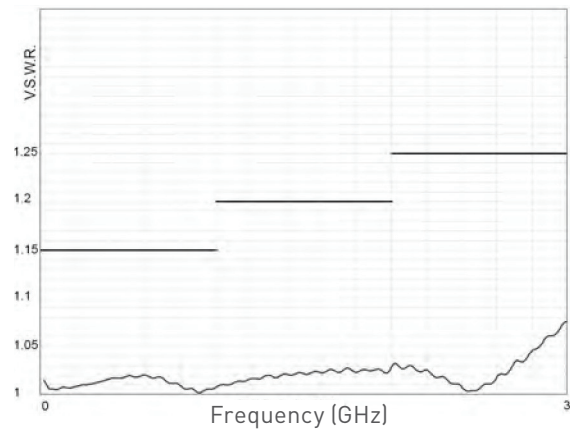


Example: DPDT BNC UP TO 3 GHz

**Insertion Loss and Isolation**



**V.S.W.R.**

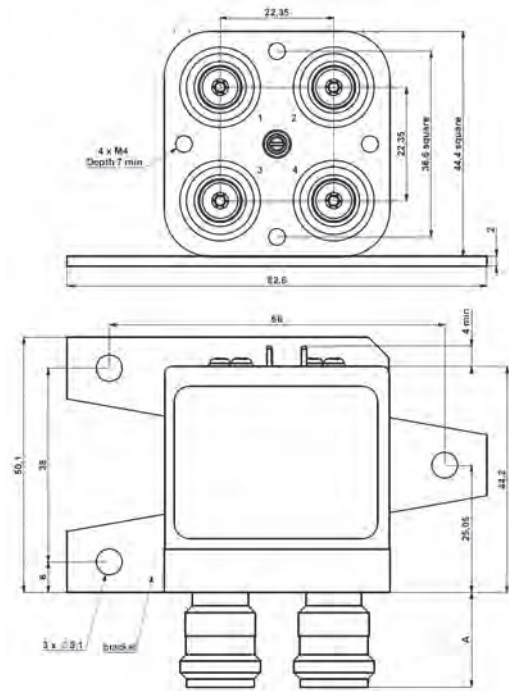


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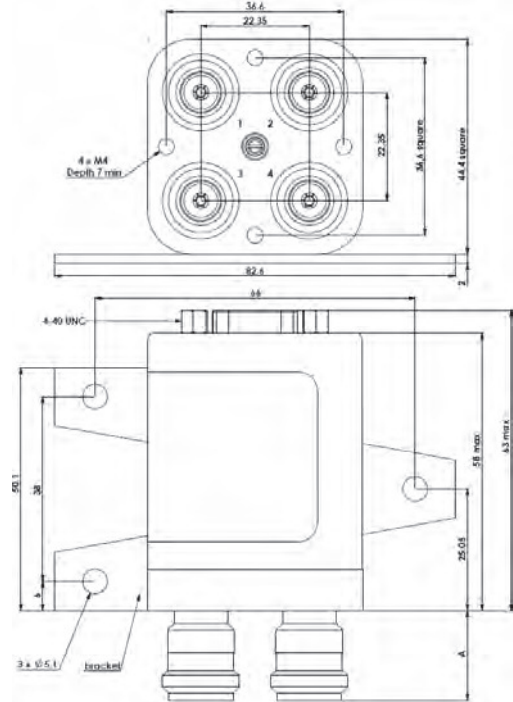
N - BNC - TNC

### TYPICAL OUTLINE DRAWING

With solder pins and bracket



With D-Sub connector and bracket



See page 4-13 for pin allocation

Connectors	N	BNC	TNC
A max (mm)	18.8	11	11

### ACCESSORIES

A printed circuit board interface connector (ordered separately) has been designed for easy mounting on terminals.

For DPDT model R577 series => Radiall part number: **R599 910 000**

