



DowKey® 60 Series SPDT Switch

The DowKey 60 Series coaxial relays are ruggedly constructed and designed for operation to a maximum power level of 1 kilowatt. They have been the standard for air traffic control and two way radio systems for over forty years.

Also available in the 60 Series is a patented, high isolation option ("G" option) for transmit-receive applications. This option leaves the unused input open, and increases the isolation on the N/C connector to 85 dB at frequencies up to 500 MHz. This option reduces the maximum power rating of the N/C connector to 20 Watts, and will increase the VSWR of this terminal above approximately 400 MHz. They are available with or without two form "C" auxiliary contacts.

Typical applications for the 60 Series include:

- Transmit-Receive Switching
- Communication Antenna Switching
- Video Switching
- Hot Standby Transmitters or Receivers

Specifications:

Operating Voltage:

(across temperature range)

12 Vdc (11-14 Vdc)

28 Vdc (24-32 Vdc)

Coil Current (Nominal):

12 Vdc 250 mA

28 Vdc 108 mA

Operate Time:

20 mS maximum

Operating Temperature:

0°C to +65°C

Mechanical Life, Cycles:

1 x 10⁶ minimum

Nominal Weight:

12.0 oz., (340g.)

RF Characteristics

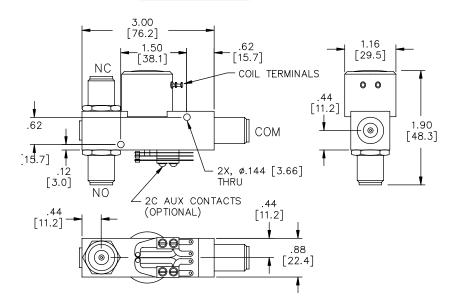
Frequency MHz	VSWR (max)	Isolation dB (min)	Ins. Loss dB (max)	RF Power Watts (CW)	
50	1.10	40	0.10	1,000	
100	1.15	35	0.15	1,000	
400	1.30	25	0.20	500	
1,000	1.60	20	0.25	350	

Connectors and Part Numbers

Nominal Coil Voltage	Connector Type	SPDT	SPDT w/DPDT Aux. Contacts	"G" Option	"G" Option w/DPDT Aux. Con.	
12 Vdc	N	60-2201	60-220142	60-2225	60-222542	
28 Vdc	N	60-2301	60-230142	60-2325	60-232542	
115 Vac	N	60-2601	60-260142	60-2625	60-262542	
12 Vdc	BNC	60-2202	60-220242	60-2226	60-222642	
28 Vdc	BNC	60-2302	60-230242	60-2326	60-232642	
115 Vac	BNC	60-2602	60-260242	60-2626	60-262642	
12 Vdc	UHF*	60-2204	60-220442	60-2228	60-222842	
28 Vdc	UHF*	60-2304	60-230442	60-2328	60-232842	
115 Vac	UHF*	60-2604	60-260442	60-2628	60-262842	

^{*}Not recommended for applications above 300 MHz.

Mechanical



TYPICAL CONNECTOR LENGTHS

			-				
CONN.	N	BNC	UHF	С	N"G"	BNC"G"	UHF"G"
DIM.	01 (Shown)	02	04	05	25	26	28
NC	0.70 [17.8]	0.60 [15.2]	0.70 [17.8]	0.70 [17.8]	1.20 [30.5]	1.20 [30.5]	1.00 [25.4]
NO	0.70 [17.8]	0.60 [15.2]	0.70 [17.8]	0.70 [17.8]	0.70 [17.8]	0.60 [15.2]	0.70 [17.8]
COMMON	0.50 [12.7]	0.70 [17.8]	0.50 [12.7]	0.50 [12.7]	0.50 [12.7]	0.70 [17.8]	0.50 [12.7]

Electrical

