Coaxial Switch — Type MOI

Description

The Type MOI SP3T to SP6T switch utilizes selected linear actuators for each position. RF geometry is optimized for SMA connectors and operates over a 0-18GHz frequency band. Individual solenoids mean faster switching time...no waiting for the switch to sequence through a number of positions before stopping at the selected position. Separate "selective" solenoids provide positive action and a low actuator current requirement. These switches are supplied with indicating switches that are mechanically linked to each solenoid for positive position indication.

This switch is part of a DowKey family of switches. Other types in this family are referenced below

Type	Conn.	Freq.
M	N &TNC	12.4 GHz
MX	SC	6.5 GHz
ML	N &TNC	12.4GHz
MO	SMA	18GHz

Standard Products

P/N	Schematic
143C71300	1
144C71300	2
145C71300	3
146C71300	4

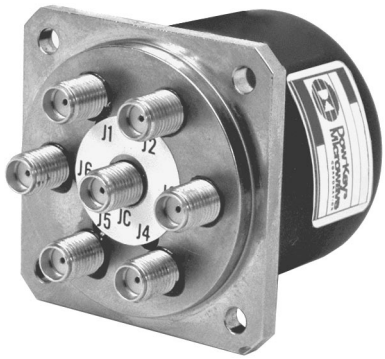
Meets MIL-S-3928

Special Configuration

Actuating Voltage	TTL Logic Circuit
Transient Circuit	Power Connector

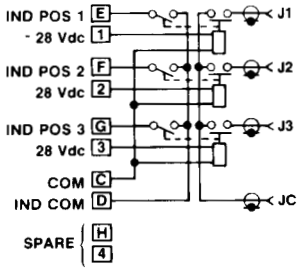
RF Circuit: SP3T to SP6T (w/ Indicator)
Actuator: *Selective
Connector: SMA
Frequency: 0-18GHz

*** Solenoid for each RF position**

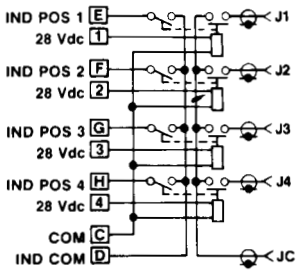


Schematic

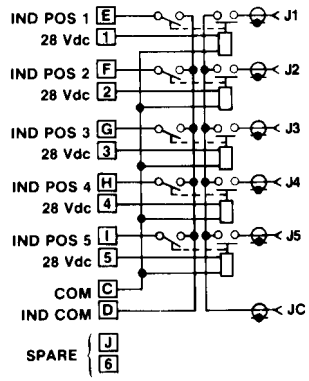
#1. 3 POS



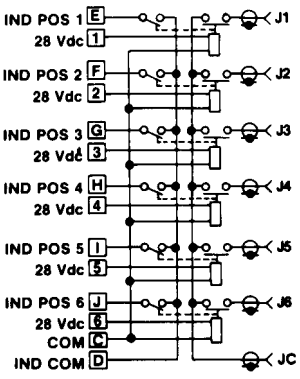
 # 2. 4 POS



 # 3. 5 POS

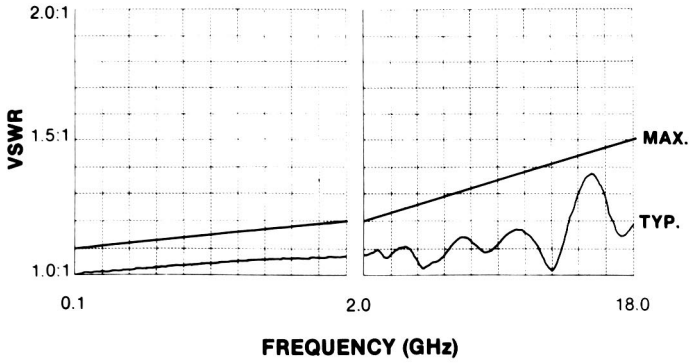


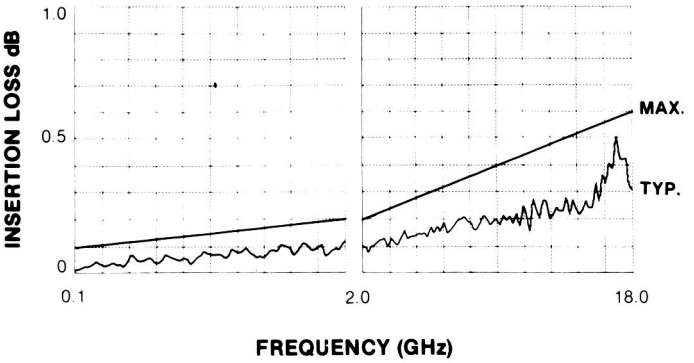
 # 4. 6 POS

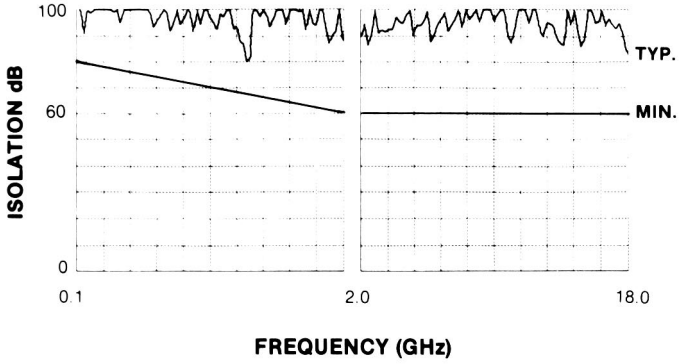


Specifications

Typical RF data of a production switch; computer printouts below:





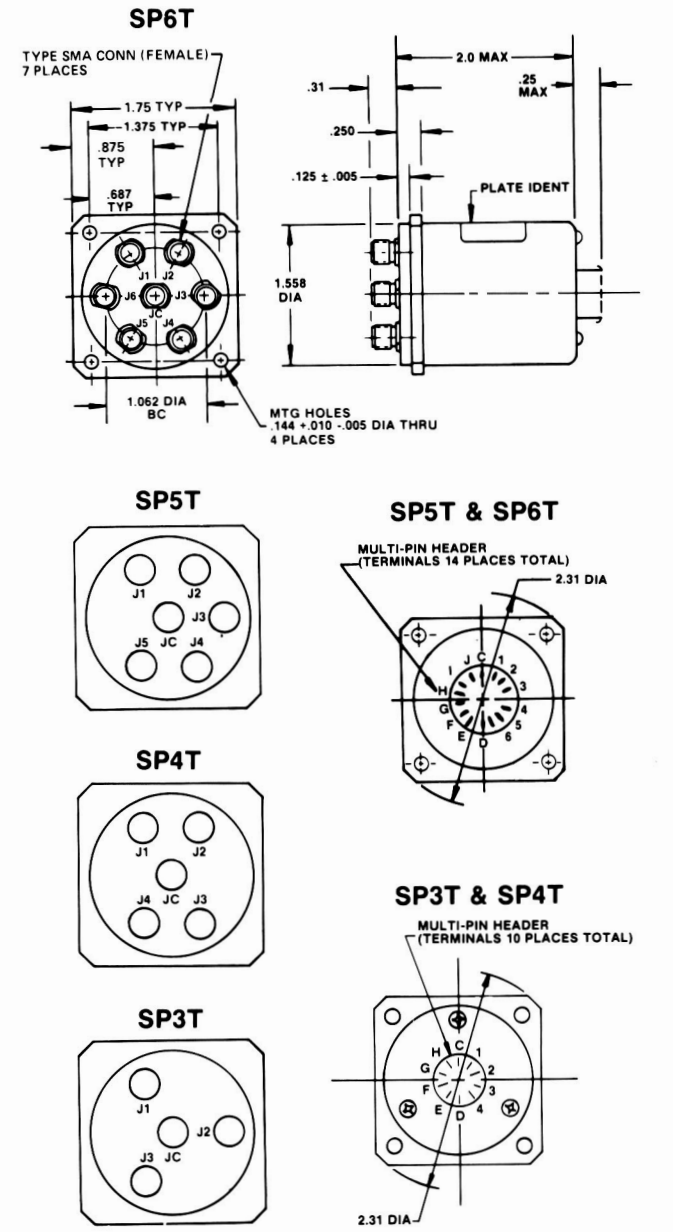


Lower Frequency

At 10MHz, typical values are:
Isolation: 100dB
VSWR: 1.05:1
Insertion Loss: 0.05dB
Because of the inherently good RF performance at lower frequencies, this product line is not tested below 2GHz except upon request.

Voltage:	24 to 30Vdc
Coil Resistance:	205 ± 15 Ohms @ 20°C
Current:	170mA max @ 28Vdc and 20°C
Switching Time:	20 milliseconds @ 28Vdc and 20°C
Impedance:	50 Ohms nominal
Temperature:	-55°C to 85°C
Vibration:	20g's sine/random
Life:	1,000,000 cycles min
Weight:	5.5 oz. max for the SP6T

Dimensions



Coaxial Switch — Type MO

Description

The Type MO SP3T to SP6T switch utilizes selected linear actuators for each position. RF geometry is optimized for 3.5mm connectors and operates over a 0-26.5GHz frequency band. Individual solenoids mean faster switching time...no waiting for the switch to sequence through a number of positions before stopping at the selected position. Separate “selective” solenoids provide positive action and a low actuator current requirement.

Standard Products

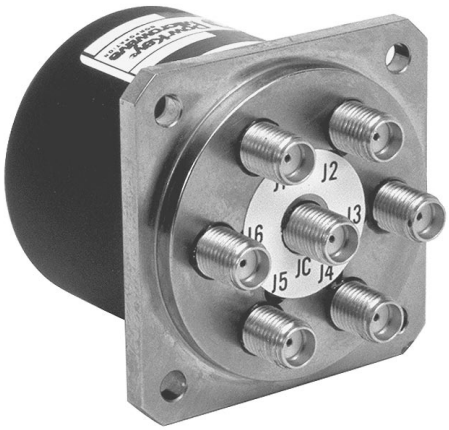
P/N	Schematic	Type
153C90600	1	Selective 3 pos.
154C90600	2	Selective 4 pos.
155C90600	3	Selective 5 pos.
156C90600	4	Selective 6 pos.

Meets MIL-S-3928

Special Configuration

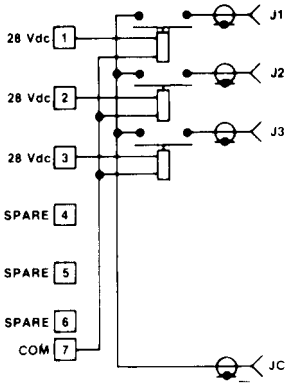
Actuating Voltage
Transient Circuit
TTL Logic Circuit

RF Circuit: SP3T to SP6T
Actuator: Selective with Solder Terminals*
Connector: 3.5mm**
Frequency: 0-26.5GHz

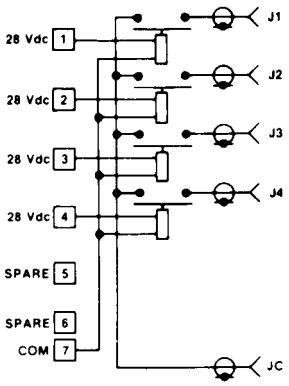


Schematic

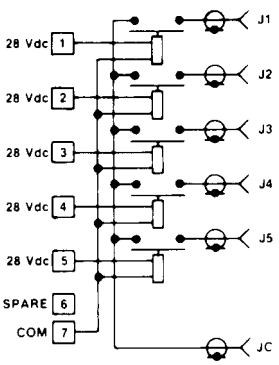
#1. 3 POS



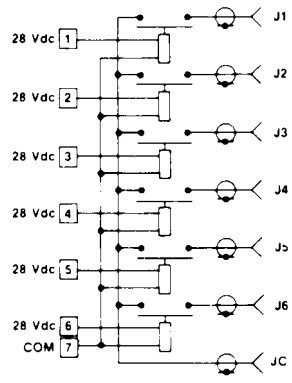
 # 2. 4 POS



 # 3. 5 POS



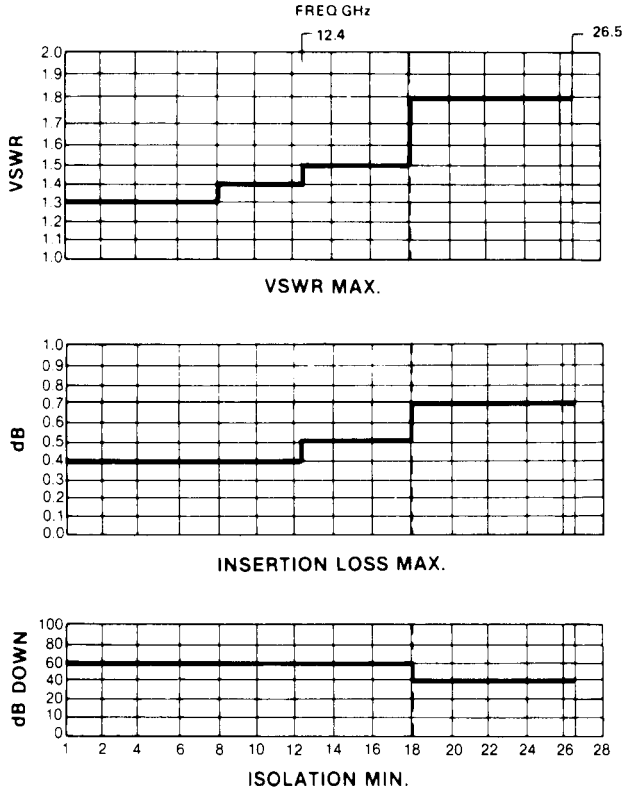
 # 4. 6 POS



Specifications

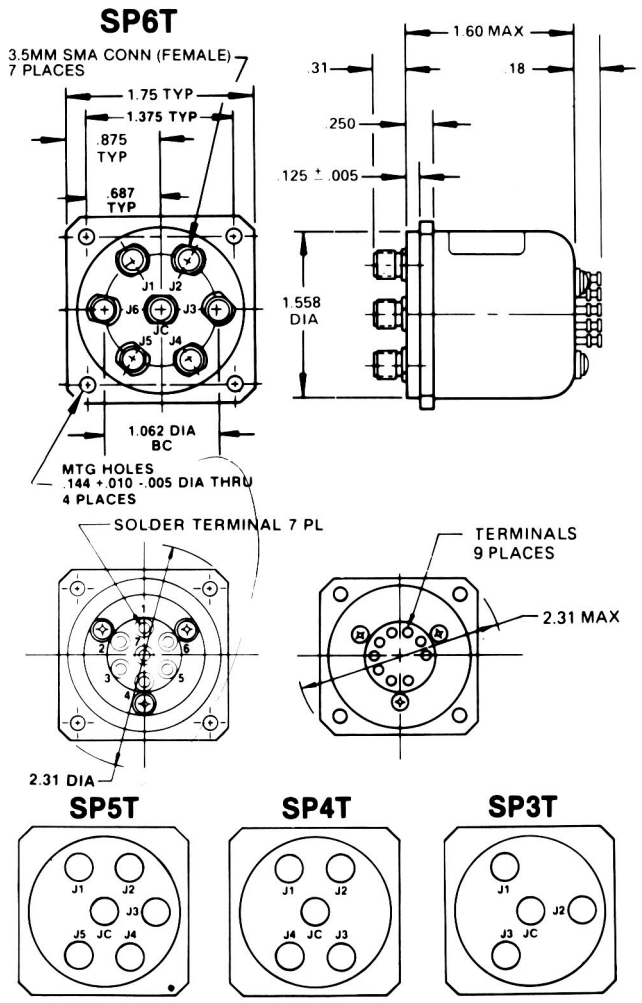
* Solenoid for each RF position
** Mates with SMA

RF Characteristics



Voltage:	20 to 30Vdc
Coil Resistance:	205 ± 15 Ohms @ 20°C
Current:	170mA max @ 28Vdc and 20°C
Switching Time:	20 milliseconds @ 28Vdc and 20°C
Impedance:	50 Ohms nominal
Temperature:	-55°C to 85°C
Vibration:	10g's sine/random
Life:	1,000,000 cycles min
Weight:	5.5 oz. max for the SP6T

Dimensions



Lower Frequency

At 10MHz, typical values are:
Isolation: 100dB
VSWR: 1.05:1
Insertion Loss: 0.05dB
Because of the inherently good RF performance at lower frequencies, this product line is not tested below 2GHz except upon request.

Coaxial Switch — Type M

Description

The Type M SP3T to SP6T switch utilizes selected linear actuators for each position. RF geometry is optimized for N and TNC connectors and operates over a 0-12.4GHz frequency band. Individual solenoids mean faster switching time...no waiting for the switch to sequence through a number of positions before stopping at the selected position. Separate "selective" solenoids provide positive action and a low actuator current requirement.

This switch is part of the DowKey family of switches. Other types in this family are referenced below.

Type	Conn.	Freq.
MX	SC	6.5 GHz
ML	N &TNC	12.4GHz
MO	SMA	18GHz

Designed to meet MIL-S-3928

RF Circuit: SP3T to SP6T
Actuator: *Selective
Connector: N and TNC
Frequency: 0-12.4GHz

Standard Products

P/N	Schematic	Conn	Ind Ckt
133C00100	1	N	NO*
133C00200	1	N	YES
133C30100	1	TNC	NO*
133C30200	1	TNC	YES
134C00100	2	N	NO*
134C00200	2	N	YES
134C30100	2	TNC	NO*
134C30200	2	TNC	YES
135C00100	3	N	NO*
135C00200	3	N	YES
135C30100	3	TNC	NO*
135C30200	3	TNC	YES
136C00100	4	N	NO*
136C00200	4	N	YES
136C30100	4	TNC	NO*
136C30200	4	TNC	YES

*** Indicator circuit pins are spare on units without indicator circuits**

Special Configuration

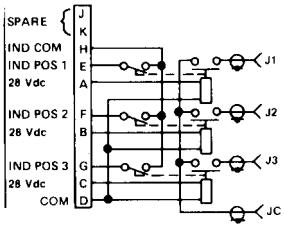
115 Vac
Solder Terminals

Other Products

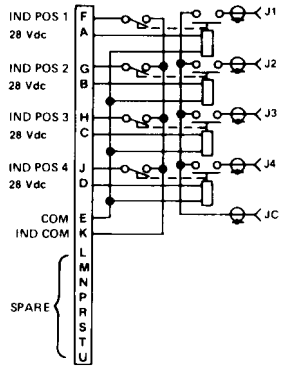
Face mount and face mount with indicator switches

Schematic

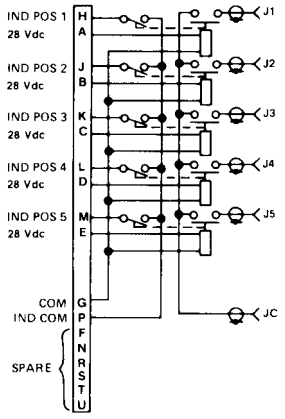
#1. SP3T w/Indicator



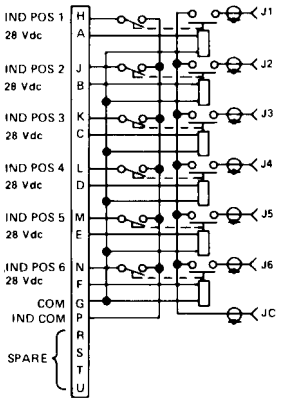
2. SP4T w/Indicator



3. SP5T w/Indicator



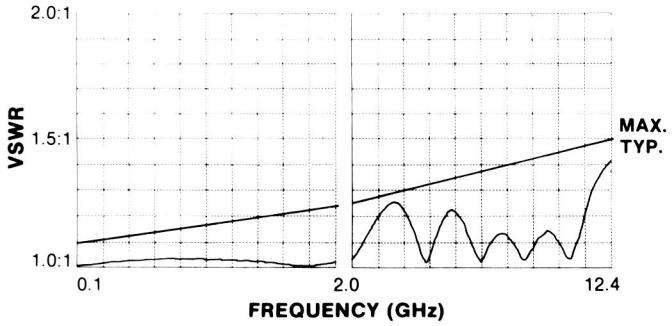
4. SP6T w/Indicator

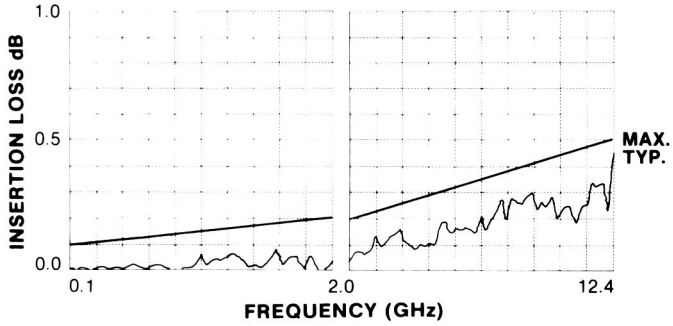


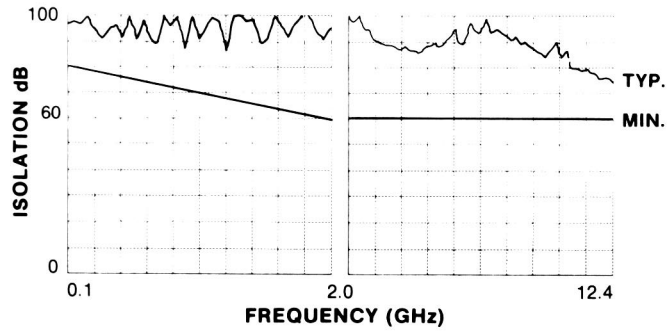
Specifications

Typical RF data of a production switch; computer printout below:

TNC data shown

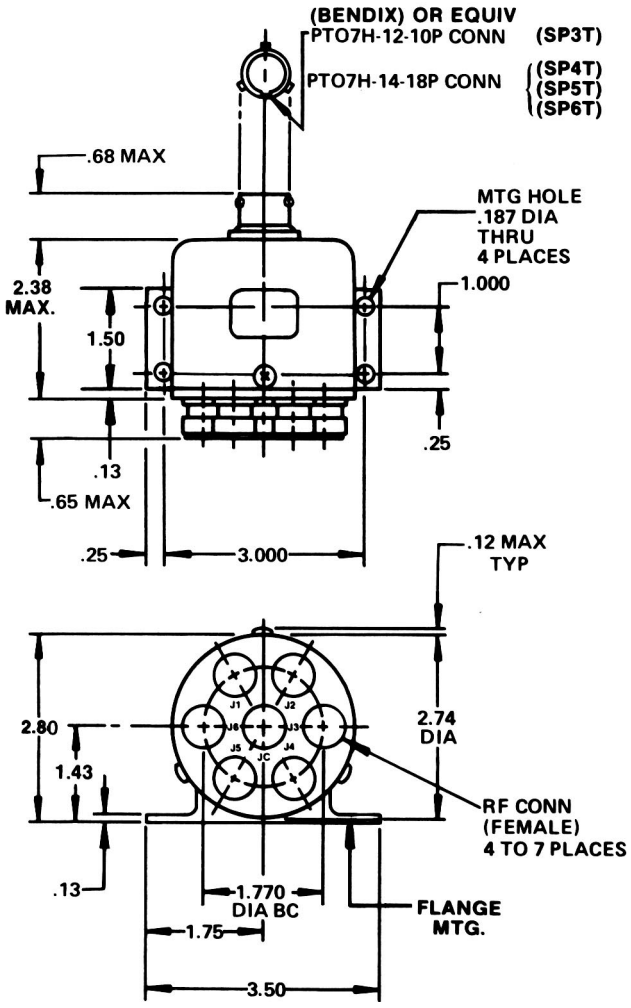






Voltage:	20 to 30Vdc
Coil Resistance:	205 ± 15 Ohms @ 20°C
Current:	170mA max @ 28Vdc and 20°C
Switching Time:	20 milliseconds @ 28Vdc and 20°C
Impedance:	50 Ohms nominal
Temperature:	-55°C to 85°C
Vibration:	10g's sine/random
Life:	100,000 cycles min
Weight:	16 oz max for the SP6T and ind ckt

Dimensions



Lower Frequency

At 10MHz, typical values are:
Isolation: 100dB
VSWR: 1.05:1
Insertion Loss: 0.05dB
Because of the inherently good RF performance at lower frequencies, this product line is not tested below 2GHz except upon request.

Coaxial Switch Type MX

Description

The Type MX coaxial switches are designed for high average power applications over a frequency band 0-6.5GHz. They use SC connectors, one-inch center-to-center spacing.

These switches utilize HCI (heat conducting dielectric) to increase the average power handling capabilities. Test results on a large number of components employing HCI have consistently indicated a CW power rating 2.5 times greater than obtainable with conventional low-loss dielectric materials.

The Type MX SP3T to SP6T switch utilizes selected linear actuators for each position. Individual solenoids mean faster switching time...no waiting for the switch to sequence through a number of positions before stopping at the selected position. These switches are available with or without mechanically activated indicating switches, giving positive position indication.

This switch is part of a DowKey family of switches. Other types in this family are referenced below.

Type	Conn.	Freq.
M	N & TNC	12.4GHz
ML	N &TNC	12.4GHz
MO	SMA	18GHz

Designed to meet MIL-S-3928
*** Transco developed proprietary material**

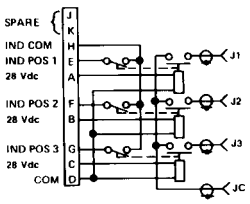
Standard Products

P/N	Pos	Schematic	Ind Ckt
133C51100	3	1	NO
133C51200	3	1	YES
134C51100	4	2	NO
134C51200	4	2	YES
135C51100	5	3	NO
135C51200	5	3	YES
136C51100	6	4	NO
136C51200	6	4	YES

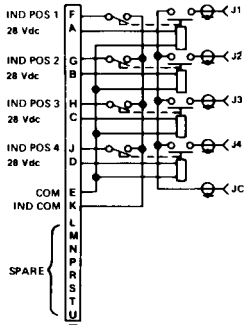
RF Circuit: SP3T to SP6T
Actuator: Selective
Connector: SC
Frequency: 0-6.5GHz

Schematic

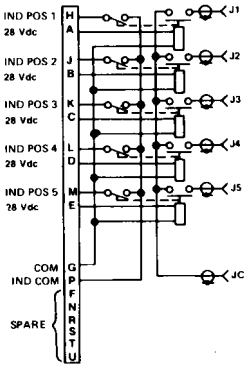
#1. SP3T w/Indicator



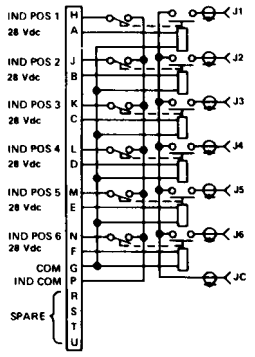
 # 2. SP4T w/Indicator



 # 3. SP5T w/Indicator

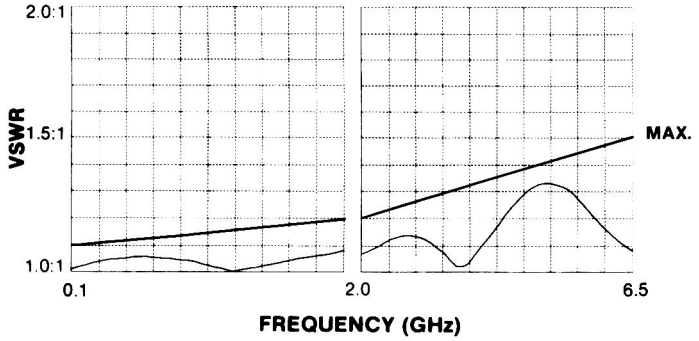


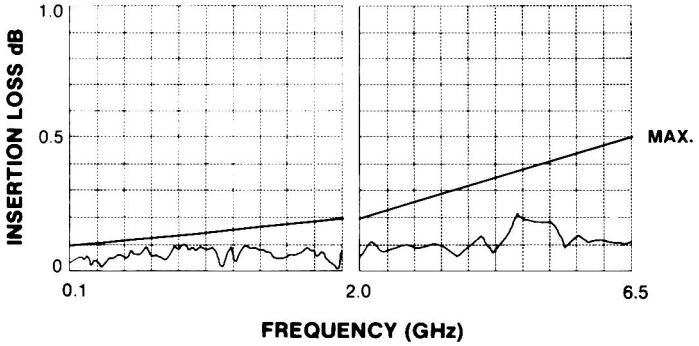
 # 4. SP6T w/Indicator

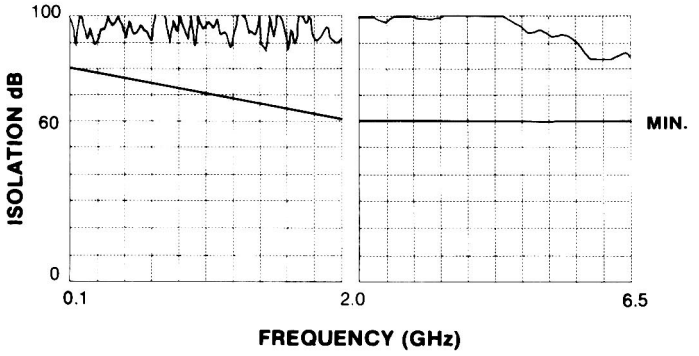


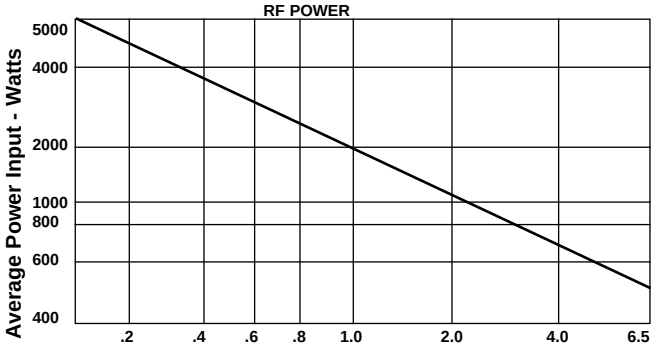
Specifications

Typical RF data of a production switch; computer printout below:





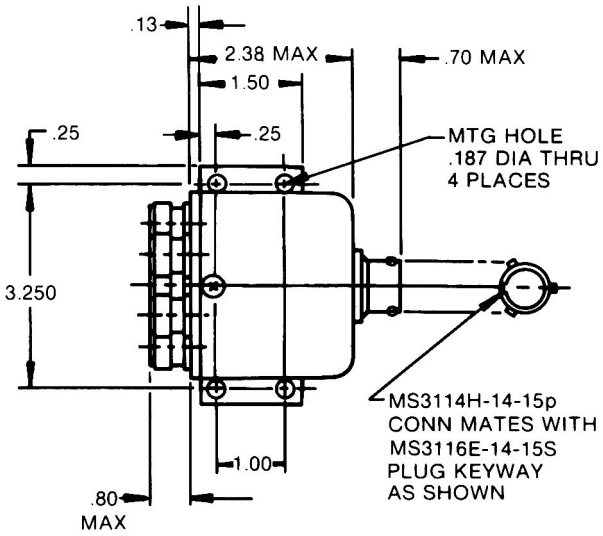


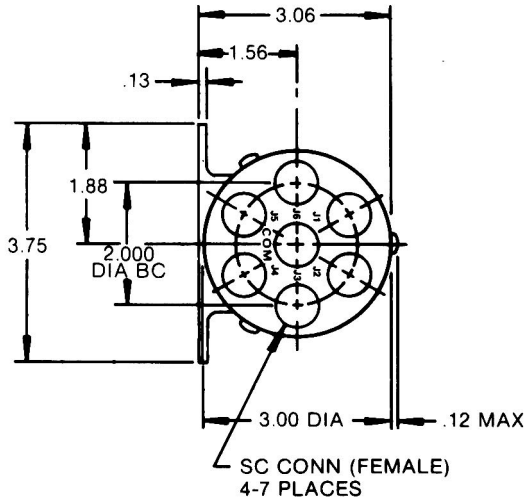


1500 Watts Average At 1 GHz

Voltage:	22 to 30Vdc
Coil Resistance:	210 ± 15 Ohms @ 20°C
Current:	170mA max @ 28Vdc and 20°C
Switching Time:	20 milliseconds @ 28Vdc and 20°C
Impedance:	50 Ohms nominal
Temperature:	-55°C to 85°C
Vibration:	10g's sine/random
Life:	100,000 operations min - each pos
Weight:	18.5 oz (136C51100)

Dimensions





Lower Frequency

At 10MHz, typical values are:
Isolation: 80dB
VSWR: 1.05:1
Insertion Loss: 0.05dB
Because of the inherently good RF performance at lower frequencies, this product line is not tested below 2GHz except upon request.

Transco Products, Inc. Switches listed in MIL-S-55041C

SP2T Failsafe

Specification Sheet	Option No.	TPI Part No.	FSN 5985
MIL-S-55041/3A	/3-001	35D02800	_
	/3-002	32C01200	-
	/3-005	33D01300	-
	/3-006	33D00300	01-039-8434

Transfer Latching

Specification Sheet	Option No.	TPI Part No.	FSN 5985
MIL-S-55041/4A	/4-001	33C00500	-
	/4-002	33D00200	00-009-4530

1P2T Failsafe

Specification Sheet	Option No.	TPI Part No.	FSN 5985
MIL-S-55041/6A	/6-001	33C12500	-

2P2T Failsafe

Specification Sheet	Option No.	TPI Part No.	FSN 5985
MIL-S-55041/7A	/7-001	33D00100-10	-
	/7-002	33D01100	-

1P2T Latching

Specification Sheet	Option No.	TPI Part No.	FSN 5985
MIL-S-55041/11	/11-001	33D08400	01-073-1529
	/11-002	33D06400	-
	/11-003	33D04400	-
	/11-004	33D03400	01-099-6613 00-009-3159
	/11-005	33D00400	-

Reference Table of Rigid Rectangular Wavetable Data and Fittings

EIA WG DESIGNATION WR ( )	RECOMMENDED OPERATE RANGE FOR TE_{10} MODE		CUT-OFF FOR FOR TE_{10} MODE		RANGE IN $\frac{2\lambda}{\lambda c}$	RANGE IN $\frac{\lambda g}{\lambda}$	THEORETICAL PEAK POWER RATING LOWEST TO HIGHEST FREQUENCY MEGAWATTS	THEORETICAL ATTENUATION LOWEST TO HIGHEST FREQUENCY	JAN FLANGE DESIG.		CHOKE UG ( )/U	DIMENSIONS (inches)						WALL THICKNESS NOMINAL
	FREQUENCY GHz	WAVELENGTH (cm)	FREQUENCY GHz	WAVELENGTH (cm)					MATERIAL ALLOY	JAN WG DESIGNATION RG( )/U		COVER UG ( )/U	EIA WG DESIGNATION WR ( )	INSIDE	TOL.	OUTSIDE	TOL.	
2300	0.32-0.49	93.68-61.18	0.256	116.84	1.60-1.05	1.68-1.17	153.0-212.0	.051-.031	Alum				2300	23.000-11.500	+ .020	23.250-11.750	+ .020	0.125
2100	0.35-0.53	85.65-56.56	0.281	106.68	1.62-1.06	1.68-1.18	120.0-173.0	.054-.034	Alum.				2100	21.000-10.500	+ .020	21.250-10.750	+ .020	0.125
1800	0.41-0.625	73.11-47.96	0.328	91.44	1.60-1.05	1.67-1.18	93.4-131.9	.056-.038	Alum.	201			1800	18.000-9.000	+ .020	18.250-9.250	+ .020	0.125
1500	0.49-0.75	61.18-39.97	0.393	76.20	1.61-1.05	1.62-1.17	67.6-93.3	.069-.050	Alum.	202			1500	15.000-7.500	+ .015	15.250-7.750	+ .015	0.125
1150	0.64-0.96	46.84-31.23	0.513	58.42	1.60-1.07	1.82-1.18	35.0-53.8	.128-.075	Alum.	203			1150	11.500-5.750	+ .015	11.750-6.000	+ .015	0.125
975	0.75-1.12	39.95-26.76	0.605	49.53	1.61-1.08	1.70-1.19	27.0-38.5	.137-.095	Alum.	204			975	9.750-4.875	+ .010	10.000-5.125	+ .010	0.125
770	0.96-1.45	31.23-20.67	0.766	39.12	1.60-1.06	1.66-1.18	17.2-24.1	.201-.136	Alum.	205			770	7.700-3.850	+ .005	7.950-4.100	+ .005	0.125
650	1.12-1.70	26.76-17.63	0.908	33.02	1.62-1.07	1.70-1.18	11.9-17.2	.317-.212	Brass	69	417A		650	6.500-3.250	+ .005	6.660-3.410	+ .005	0.080
								.269-.178	Alum.	103	418A							
510	1.45-2.20	20.67-13.62	1.157	25.91	1.60-1.05	1.67-1.18	7.5-10.7						510	5.100-2.550	+ .005	5.260-2.710	+ .005	0.080
430	1.70-2.60	17.63-11.53	1.372	21.84	1.61-1.06	1.70-1.18	5.2-7.5	.588-.385	Brass	104	435A		430	4.300-2.150	+ .005	4.460-2.150	+ .005	0.080
								.501-.330	Alum.	105	437A							
340	2.20-3.20	13.63-9.08	1.736	17.27	1.58-1.05	1.78-1.22	3.1-4.5	.877-.572	Brass	112	553		340	3.400-1.700	+ .005	3.560-1.860	+ .005	0.080
								.751-.492	Alum.	113	554							
284	2.60-3.95	11.53-7.59	2.078	14.43	1.50-1.05	1.67-1.17	2.2-3.2	1.102-.752	Brass	48	54	53	284	2.840-1.340	+ .005	3.000-1.500	+ .005	0.080
								.940-.641	Alum.	75	585	584						
229	3.30-4.90	9.08-6.12	2.577	11.63	1.56-1.05	1.6-2.2							229	2.290-1.145	+ .005	2.418-1.273	+ .005	0.064
187	3.95-5.85	7.59-5.12	3.152	9.510	1.60-1.08	1.67-1.19	1.4-2.0	2.08-1.44	Brass	49	148B	149A	187	1.872-0.872	+ .005	2.000-1.000	+ .005	0.064
								1.77-1.12	Alum.	95	406A	407						
159	4.90-7.05	6.12-4.25	3.711	8.078	1.51-1.05	1.52-1.19	0.79-1.0						159	1.590-0.795	+ .004	1.718-0.923	+ .004	0.064
137	5.85-8.20	5.12-3.66	4.301	6.970	1.47-1.05	1.48-1.17	0.56-0.71	2.87-2.30	Brass	50	343A	344	137	1.372-0.622	+ .004	1.500-0.750	+ .004	0.064
								2.45-1.94	Alum.	106	440A	441						
112	7.05-10.00	4.25-2.99	5.259	5.700	1.49-1.05	1.51-1.17	0.35-0.46	4.12-3.21	Brass	51	52A	51	112	1.122-0.497	+ .004	1.250-0.625	+ .004	0.064
								3.50-2.74	Alum.	68	137A	138						
90	8.20-12.40	3.66-2.42	6.557	4.572	1.60-1.06	1.68-1.18	0.20-0.29	6.45-4.48	Brass	52	40A	39	90	0.900-0.400	+ .003	1.000-0.500	+ .003	0.050
								5.49-3.83	Alum.	67	136A	135						
75	10.00-15.00	2.99-2.00	7.868	3.810	1.57-1.05	1.64-1.117	0.17-0.23						75	0.750-0.375	+ .003	0.850-0.475	+ .003	0.050
62	12.4-18.00	2.42-1.66	9.486	3.160	1.53-1.05	1.55-1.18	0.12-0.16	9.51-8.31	Brass	91	541	419	62	0.622-0.311	+ .0025	0.702-0.391	+ .003	0.040
								___ ___	Alum	___ ___	___ ___	___ ___						
								6.14-5.36	Silver	107	___ ___	___ ___						
51	15.00-22.00	2.00-1.36	11.574	2.590	1.54-1.05	1.58-1.18	0.080-0.107						51	0.510-0.255	+ .0025	0.590-0.335	+ .003	0.040
42	18.00-26.50	1.66-1.13	14.047	2.134	1.56-1.06	1.62-1.18	0.034-0.048	20.7-14.8	Brass	53	596	595	42	0.420-0.170	+ .0020	0.500-0.250	+ .003	0.040
								17.6-12.6	Alum.	121	598	597						
								13.3-9.5	Silver	66	___ ___	___	___					
34	22.00-33.00	1.36-0.91	17.328	1.730	1.57-1.05	1.62-1.18	0.034-0.048						34	0.340-0.170	+ .0020	0.420-0.250	+ .003	0.040
								___ ___	Brass	___	600	599						
								___ ___	Alum.	___	___	___						
28	26.50-40.00	1.13-0.75	21.081	1.422	1.59-1.05	1.65-1.17	0.022-0.031	21.9-15.0	Silver	96	___	___	28	0.280-0.140	+ .0015	0.360-0.220	+ .002	0.040
22	33.00-50.00	0.91-0.60	26.342	1.138	1.60-1.05	1.67-1.17	0.014-0.020	___ ___	Brass	___	385	383	22	0.224-0.112	+ .0010	0.304-0.192	+ .002	0.040
								31.0-20.9	Silver	97								
19	40.00-60.00	0.75-0.50	31.357	0.956	1.57-1.05	1.63-1.16	0.011-0.015						19	0.188-0.094	+ .0010	0.268-0.174	+ .002	0.040
15	50.000-75.000	60-0.40	39.863	0.752	1.60-1.06	1.67-1.17	0.0063-0.0090	___ ___	Brass	___	385		15	0.148-0.074	+ .0005	0.0202-0.141	+ .002	0.040
								52.9-39.1	Silver	98		___						
12	60.00-90.00	0.50-0.33	48.350	0.620	1.61-1.06	1.68-1.18	0.0042-0.0060	___ ___	Brass	___	387		12	0.122-0.061	+ .0005	0.202-0.141	+ .002	0.040
								93.3-52.2	Silver	99		___						
10	75.00-110.00	0.40-0.27	59.010	0.508	1.57-1.06	1.61-1.18	0.0030-0.0041						10	0.100-0.050	+ .0005	0.180-0.130	+ .002	0.040
8	90.00-140.00	0.333-0.214	73.840	.406	1.64-1.05	1.75-1.17	0.0018-0.0026	152-99	Silver	138	___	___	8	0.080-0.040	+ .00003	0.156DIA	+ .001	___
7	110.00-170.00	0.272-0.176	90.840	.330	1.64-1.06	1.77-1.18	0.0012-0.0017	163-137	Silver	136	___	___	7	0.065-0.325	+ .000025	0.156DIA	+ .001	___
5	140.00-220.00	0.214-0.136	115.750	.259	1.65-1.05	1.77-1.18	0.0012-0.00107	308-193	Silver	135	___	___	5	0.051-0.0255	+ .000025	0.156DIA	+ .001	___
4	170.00-260.00	0.176-0.115	137.520	.218	1.61-1.05	1.69-1.17	0.00052-0.00075		384-254	Silver	137	___	___	4 0.043-0.0215	+ .000020	0.156DIA	+ .001	___
3	220.00-325.00	0.136-0.092	173.280	.173	1.57-1.06	1.62-1.18	0.00035-0.00047		512-348	Silver	139	___	___	3 0.034-0.0170	+ .000020	0.156DIA	+ .001	___

Waveguide Switch Type GR

Description

The state-of-the-art Type GR Waveguide switch series with ten different waveguide sizes utilizes the unique transactor actuator. This direct coupled actuator is small in size and more reliable than older designs using motors/gears, rotary or linear solenoids. The complete line is available failsafe or latching.

Standard Products

The following are standard for this switch series: failsafe or latching, choke flanges, pressurized, indicator circuits, 28Vdc, power connector.

Special Configuration

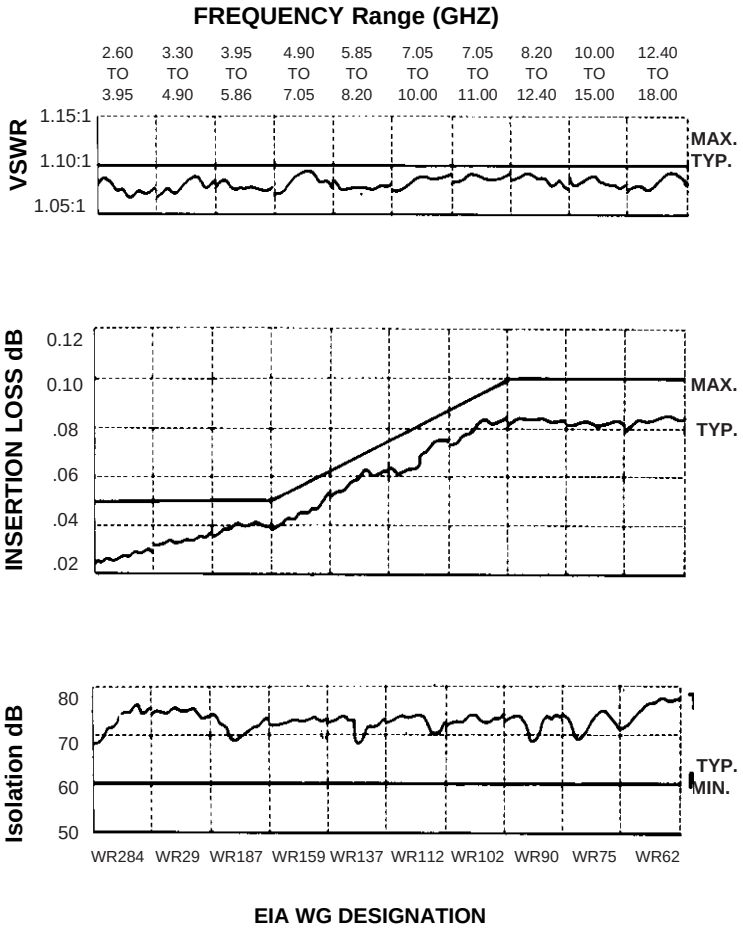
Actuating Voltage
Transient Circuit

Transactor Actuator

Transco has used modern motor technology and combined the actuator rotor and switch RF rotor in a single integrated assembly. This exclusive design feature greatly extends the switch life.

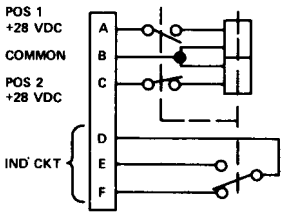
RF Circuit: 3 or 4 Port
Actuator: Latching and Failsafe
Connector: WR284 - WR62
Frequency: 2.6-18GHz

RF Performance

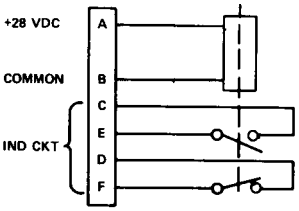


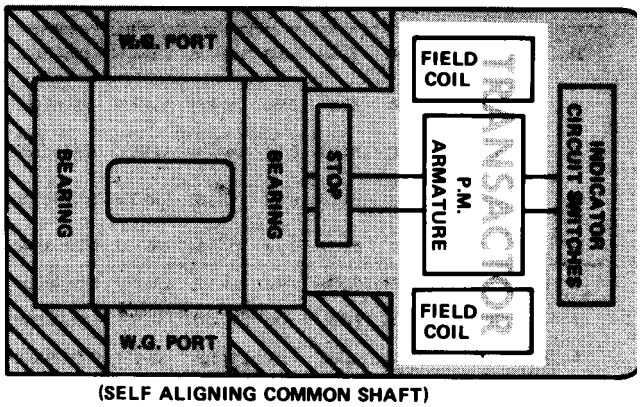
Schematic

#1. Latching



 # 2. Failsafe

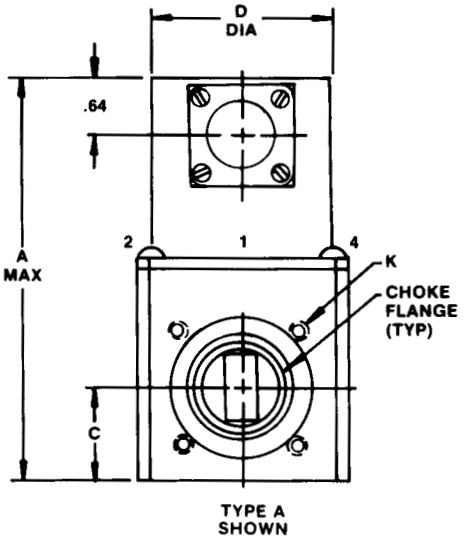


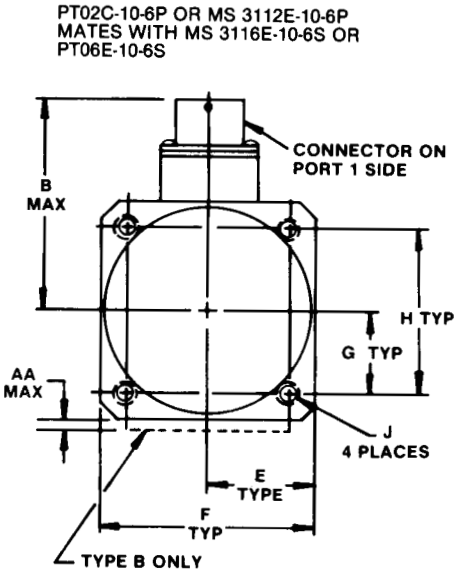


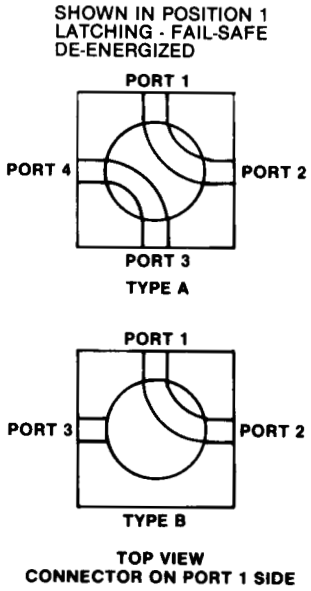
(SELF ALIGNING COMMON SHAFT)

Positions:	3 or 4 port
RF Power:	equivalent to 90° E-Plane WG bend
Actuator:	“transactor”
Voltage:	24 to 30Vdc
Current:	see chart
Switching Time:	see chart
Indicator:	for switching position
Pressurized:	20 psig
Temperature:	-54°C to 95°C
Life:	200,000 cycles min
Finish:	dull black

Dimensions and Part Numbers







PART NO.	WAVE-GUIDE SIZE	SWITCH TYPE	FREQUENCY RANGE GHz	SWITCHING TIME, MAX	CURRENT AMP MAX (28Vdc, 20°C)	AA	A	B	C	D	E	F	G	H	J	K	WEIGHT LBS. MAX.
33D00100	WR 62	A FAILSAFE	12.4 - 18.00	100MS	.5	-	3.80	1.87	.877	1.850	.9375	1.875	.718	1.437	8-32 x .25 DEEP	6-32 x .22 DEEP	1.3
33D00200	WR 62	A LATCHING	↕	↕	1	-	4.00	↕	↕	↕	↕	↕	↕	↕	↕	↕	↕
33D00300	WR 62	B FAILSAFE	↕	↕	.5	.10	3.80	↕	↕	↕	↕	↕	↕	↕	↕	↕	↕
33D00400	WR62	B LATCHING	12.4-18.00	↕	1	.10	4.00	↕	.877	↕	↕	↕	↕	↕	↕	↕	1.3
33D09100	WR 75	A FAILSAFE	10.0 - 15.00	↕	.5	-	3.95	↕	.941	↕	↕	↕	↕	↕	↕	↕	1.4
33D09200	WR 75	A LATCHING	↕	↕	1	-	4.15	↕	↕	↕	↕	↕	↕	↕	↕	↕	↕
33D09300	WR 75	B FAILSAFE	↕	↕	.5	.10	3.95	↕	↕	↕	↕	↕	↕	↕	↕	↕	↕
33D09400	WR 45	B LATCHING	10.0-15.00	↕	1	.10	4.15	↕	.941	↕	↕	↕	↕	↕	↕	6-32 x .22 DEEP	↕
33D01100	WR 90	A FAILSAFE	8.20-12.40	↕	.5	-	4.05	↕	1.016	↕	↕	↕	↕	↕	↕	8-32 x .22 DEEP	↕
33D01200	WR 90	A LATCHING	↕	↕	1	-	4.30	↕	↕	↕	↕	↕	↕	↕	↕	↕	↕
33D01300	WR 90	B FAILSAFE	↕	↕	.5	.13	4.05	↕	↕	↕	↕	↕	↕	↕	↕	↕	↕
33D01400	WR 90	B LATCHING	8.20-12.40	↕	1	.13	4.30	1.87	1.016	1.850	.9375	1.875	.718	1.437	8-32 x .25 DEEP	8-32 x .22 DEEP	1.4
33D03200	WR 112	A LATCHING	7.05 - 10.00	↕	1	-	5.10	2.07	1.245	2.25	1.187	2.375	1.000	2.000	10-32 x .31 DEEP	8-32 x .28 DEEP	2.3
33D03400	WR112	B LATCHING	7.05-10.00	100MS	1	.13	5.10	2.07	1.245	2.25	1.187	2.375	1.000	2.000	10-32 x .31 DEEP	8-32 x .28 DEEP	2.3
33D04200	WR 137	A LATCHING	5.85-8.20	150MS	1	-	7.00	2.57	1.750	3.25	2.125	4.250	1.750	3.500	1/4-20 X .40 DEEP	10-32 x .30 DEEP	8.3
33D04400	WR 137	B LATCHING	5.85-8.20	↕	1	.13	7.00	↕	1.750	↕	↕	↕	↕	↕	↕	↕	8.3
33D06200	WR 187	A LATCHING	3.95-5.85	↕	1	-	7.50	↕	2.000	↕	↕	↕	↕	↕	↕	↕	9.0
33D06400	WR 187	B LATCHING	3.95-5.85	150 MS	1	.13	7.50	↕	2.00	↕	2.125	4.250	1.750	3.500	1/4-20 X .40 DEEP	10-32 x .30 DEEP	9.0
33D08200	WR 284	A LATCHING	2.60-3.95	500 MS	1.5	-	9.00	↕	2.750	↕	2.937	5.875	2.375	4.750	1/4-20 X .50 DEEP	1/4-20 X .40 DEEP	17.0
33D08400	WR 284	B LATCHING	2.60-3.95	500 MS	1.5	.15	9.00	2.57	2.750	3.25	2.937	5.875	2.375	4.750	1/4-20 X .50 DEEP	1/4-20 X .40 DEEP	17.0

Waveguide Switch Type GF

Description
This is a broad band double ridge waveguide switch similar to DowKey's standard type GR waveguide switches. This simple proven design combines the actuator rotor and switch RF rotor in a single integrated assembly.

Transactor Actuator
This is a low current bi-directional actuator developed by DowKey/Transco. Designed specifically for DowKey/Transco's waveguide switches, this actuator uses torque motor principles conforming to MIL-M-8609 (DC motors) and MIL-M-7960 (AC motors).

Transactor does not require any mechanical coupling devices normally associated with conventional solenoid type actuators. This assures long life and high reliability.

Standard Products

P/N	Schematic	Type
30D01900	A	1
30D01400	B	1

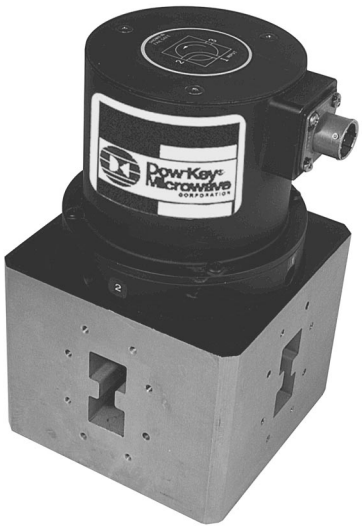
Special Configuration
Actuating Voltage
Transient Circuit

Other Products

P/N	Schematic	Type
30D00500	B	2

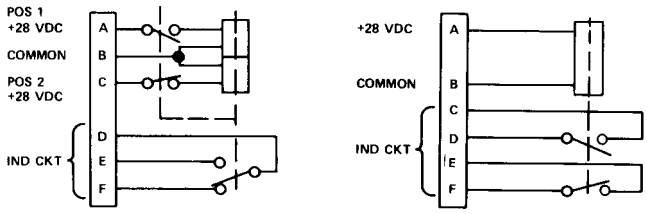
Designed to meet MIL-S-55041

RF Circuit: SPDT & Transfer
Actuator: Latching and Failsafe
Connector: WRD350D24
Frequency: 3.5-8.2GHz

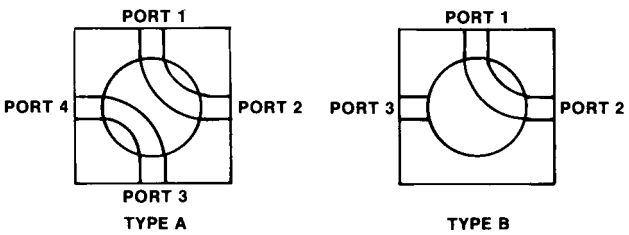


Schematic

#1. Latching **# 2. Failsafe**



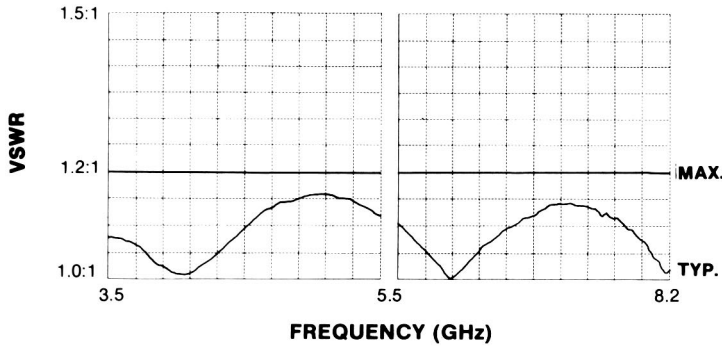
SHOWN IN POSITION 1

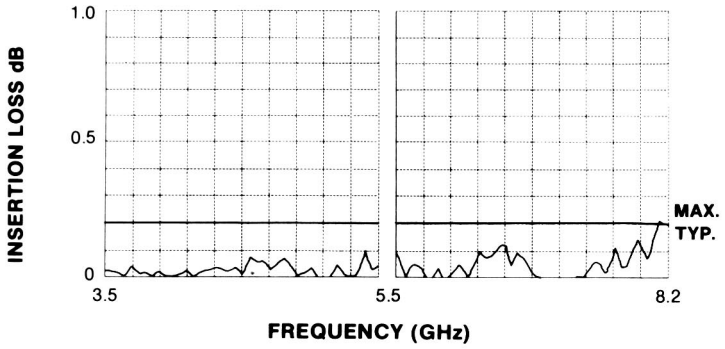


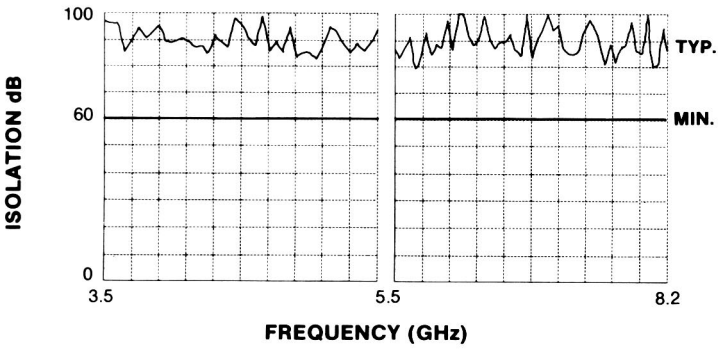
TOP VIEW
CONNECTOR ON PORT 1 SIDE

Specifications

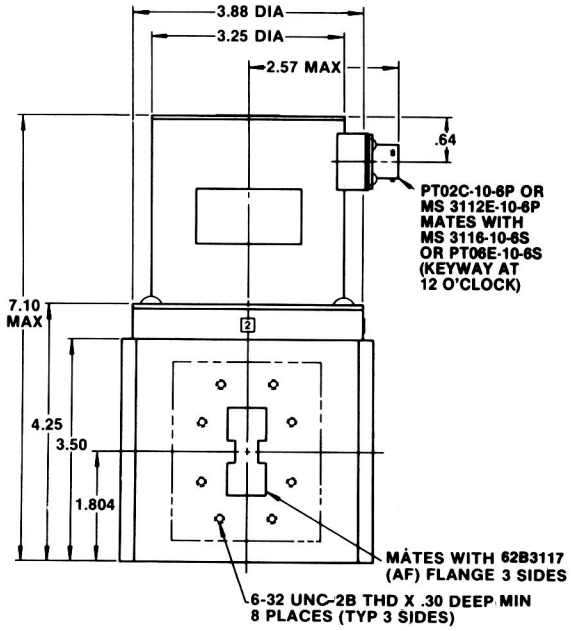
Actuator:	
Voltage:	24 to 30Vdc
Current:	.85 amps max. @ 28Vdc, 20°C
Switching Time:	150 milliseconds max
Duty:	continuos operation
Pressurized:	20 psig
Temperature:	-54°C to +84°C
Life:	200,000 actuations min
Finish:	dull black
Weight:	9 lb. max

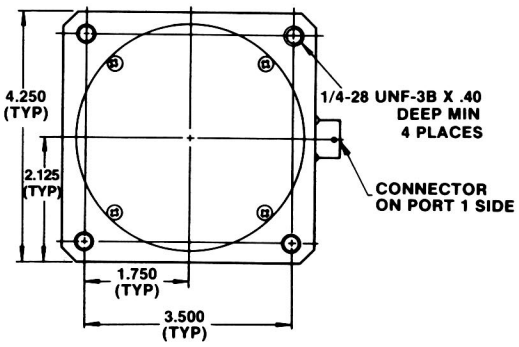






Dimensions





Waveguide Switch Type GF

Description

This is a broad band double ridge waveguide switch similar to DowKey/Transco's standard type GR waveguide switches. It features the same simple proven design of RF assembly and actuator assembly called "transactor".

Transactor Actuator

This is a low current bi-directional actuator developed by DowKey/Transco. Designed specifically for DowKey/Transco's waveguide switches, this actuator uses torque motor principles conforming to MIL-M-8609 (DC motors) and MIL-M-7960 (AC motors).

Transactor does not require any mechanical coupling devices normally associated with conventional solenoid type actuators. This assures long life and high reliability.

Standard Products

P/N	Schematic	Type
30C01200	1	A
30C01300	1	B

Special Configuration

Actuating Voltage
Transient Circuit

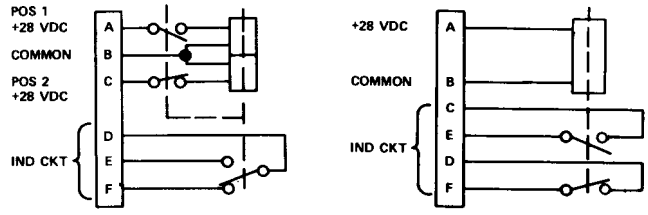
Other Products

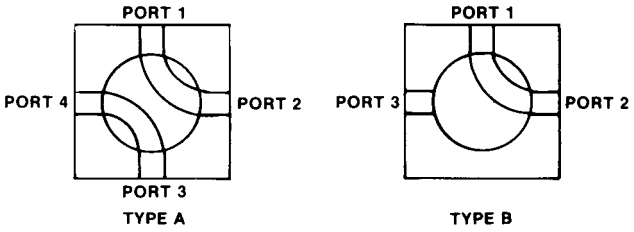
P/N	Schematic	Type
30C02000	2	A
30C02100	2	B

RF Circuit: Transfer
Actuator: Latching and Failsafe
Connector: WRD750D24
Frequency: 7.5-18GHz

Schematic

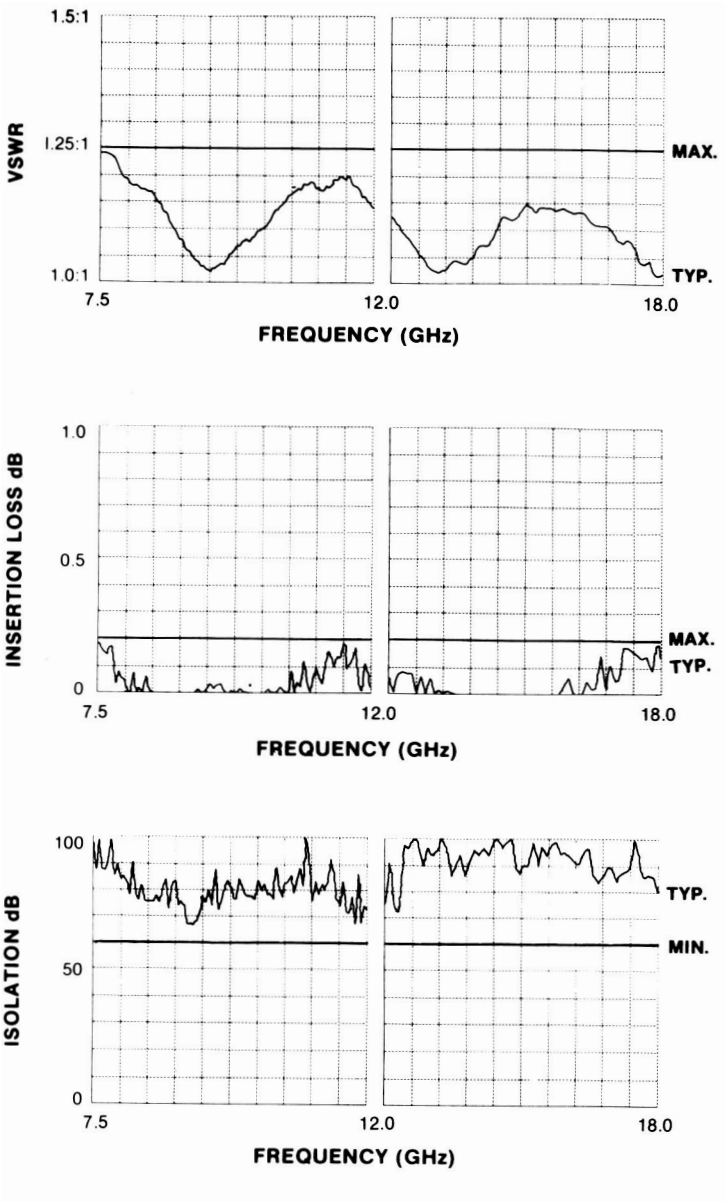
#1. Latching **# 2. Failsafe**





TOP VIEW
CONNECTOR ON PORT 1 SIDE

Specifications



Actuator:	
Voltage:	24 to 30Vdc
Current:	.80 amps max. @ 28Vdc, 20°C
Switching Time:	100 milliseconds max
Duty:	continuous operation
Pressurized:	20 psig
Temperature:	-54°C to +84°C
Life:	200,000 actuations min
Finish:	dull black
Weight:	1.3 lb. max

Dimensions