

COAXIAL SWITCH

TYPE DX

DATA SHEET 140B

RF CIRCUIT
ACTUATOR
CONNECTOR
FREQUENCY

SPDT High Power
Latching & Fail-Safe
SC
0-6.5 GHz

DESCRIPTION

The Type DX coaxial switches are designed for high average power applications over a 0-6.5 GHz frequency band. They use SC connectors with 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 2½ times greater than obtainable with conventional low-loss dielectric materials.

These switches are available in Latching or Fail-Safe models, with or without Indicating Switches.

The Latching models use Transco's Type D switch magnetic latching actuator featuring a balanced rotating armature.

The Fail-Safe models use Transco's Type D switch fail-safe actuator featuring dual holding power... a permanent magnet and electromagnet.

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

TYPE	CONN	FREQ
DO	SMA	18 GHz
D	N, TNC	12.4 GHz

DESIGNED TO MEET MIL-S-3928

STANDARD PRODUCTS

P/N	SCHEMATIC
800C51100	1
800C51200	2
810C51100	3
810C51200	4
800C50100	①
800C50200	②

① SAME AS SCHEMATIC 1, WITH THE ADDITION OF CURRENT CUTOFF CIRCUIT.

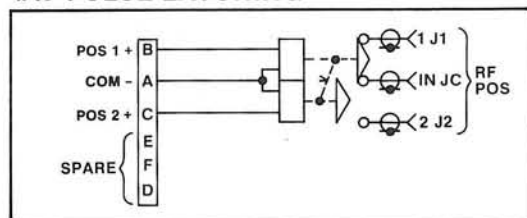
② SAME AS SCHEMATIC 2, WITH THE ADDITION OF CURRENT CUTOFF CIRCUIT.

TRANSCO PRODUCTS, INC.

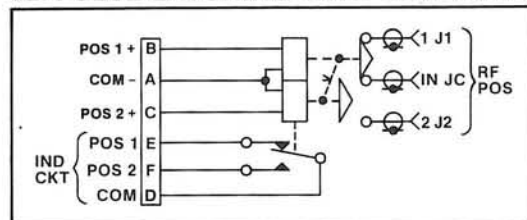


SCHEMATIC

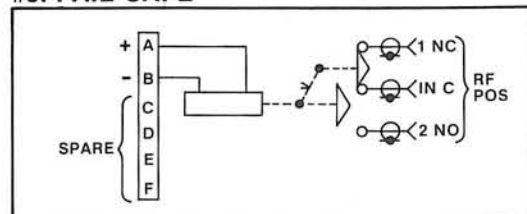
#1. PULSE LATCHING



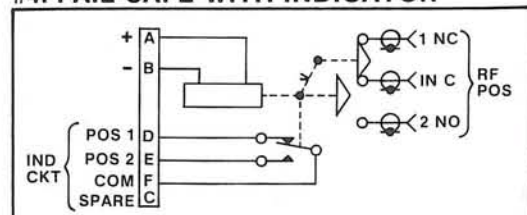
#2. PULSE LATCHING WITH INDICATOR



#3. FAIL-SAFE

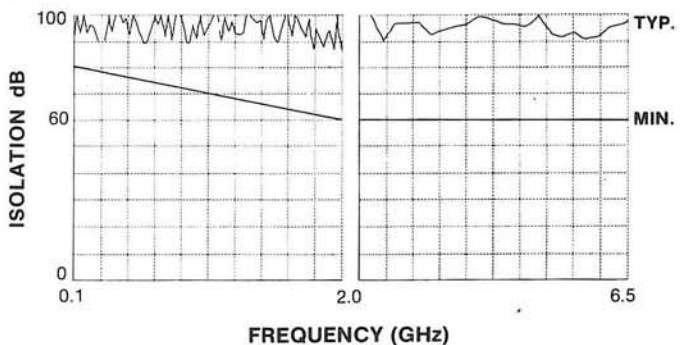
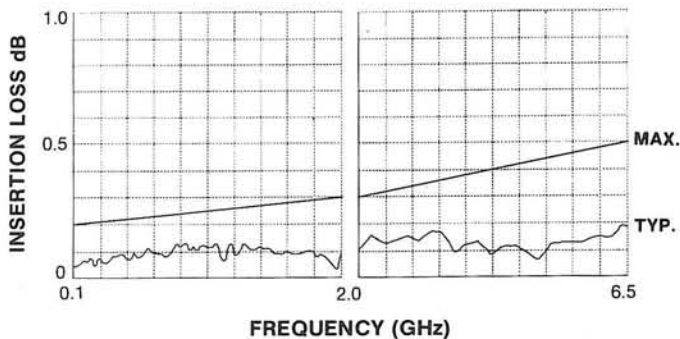
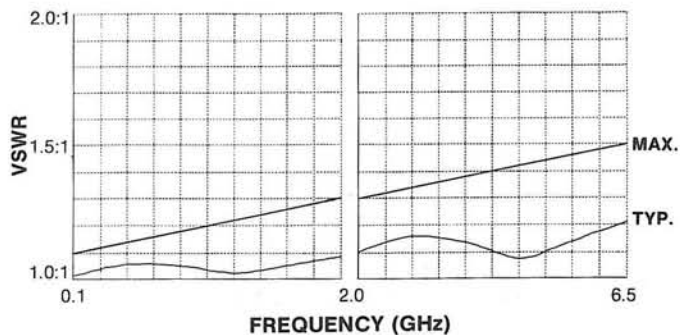


#4. FAIL-SAFE WITH INDICATOR



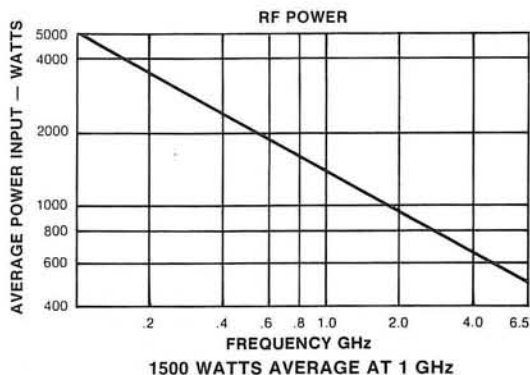
SPECIFICATIONS

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



LOWER FREQUENCY

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



VOLTAGE	20 to 30 Vdc
RF CONTACTS	break-before-make
IMPEDANCE	50 ohms nominal
VIBRATION	10 g's sine/random
TEMPERATURE	-55°C to 85°C
LIFE	100,000 operations min
WEIGHT	8.5 oz approx.

LATCHING MODELS 800C51100 & 800C51200 800C50100 & 800C50200

COIL RESISTANCE	95 ± 5 ohms @ 20°C
CURRENT	320 mA max @ 28 Vdc & 20°C
SWITCHING TIME	20 mS max @ 28 Vdc & 20°C

FAIL-SAFE MODELS 810C51100 & 810C50200

COIL RESISTANCE	190 ± 10 ohms @ 20°C
CURRENT	200 mA max @ 28 Vdc & 20°C
SWITCHING TIME	30 mS max @ 28 Vdc & 20°C

DIMENSIONS

