

HIGH POWER COAXIAL SWITCHES, TYPE "N"

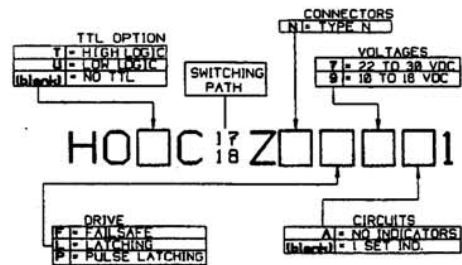
HC 17 Z SERIES

SP7T and SP8T relay style DC to 4 GHz family.

The HC17Z and HC18Z series offers reliability and performance in SP7T and SP8T switching utilizing High Power N connectors.

This DC to 4 GHz series covers typical applications in Telecommunications, Cellular and ATE.

The following pages comprise a variety of sample models commonly used.



TYPE "N" CONN FEMALE, 9 PLS MIL-C-39812 9 PL EQUALLY SPACED ON 2.328 DIA B.C.

REVISIONS				
EDN	LTR	DESCRIPTION	DATE	APPROVED

SPECIFICATIONS MICROWAVE					
FREQUENCY RANGE GHz	DC TO 0.5	0.5 TO 1	1 TO 2	2 TO 3	3 TO 4
V.S.W.R. MAX	1.10:1	1.15:1	1.2:1	1.3:1	1.4:1
INSERTION LOSS MAX	0.2 dB	0.2 dB	0.2 dB	0.3 dB	0.4 dB
ISOLATION MIN	60 dB	60 dB	60 dB	70 dB	70 dB
POWER MAX CW	1120W	600	500	500	400

IMPEDANCE: 50 OHM

ELECTRICAL:
 VOLTAGE: 18 TO 18 VDC
 CURRENT: 200 mA MAX @ 15 VDC @ 20°C
 TTL LOGIC: VOLTAGE LOW 0 TO 0.8 VDC, VOLTAGE HIGH 2.4 TO 5.5 VDC, CURRENT LOW 0 mA, CURRENT HIGH 4.0 mA MAX @ 5V

SWITCHING TIME: 20 MILLISECONDS MAX.

MECHANICAL:
 MATERIAL: ALUMINUM (RF ASSY)
 RF CONTACTS: BREAK-BEFORE MAKE
 FINISH: IRIDIUM PER MIL-C-5541
 LIFE: 1,000,000 CYCLES MIN.

ENVIRONMENTAL:
 TEMP: OPERATING 0°C TO +70°C, NON-OPERATING -40°C TO +100°C
 HUMIDITY: 0 TO 95%, NO CONDENSATION

Schematic shown in normally open position (see drawing 120)

DIMENSIONS SPECIFIED UNLESS OTHERWISE SPECIFIED		TOLERANCES		MODEL #	
DECIMALS	FRACTIONS	DECIMALS	FRACTIONS	DATE	REV
PLACES: .010	1/64	PLACES: .010	1/64	2/28/96	1/1
PLACES: .005	1/32	PLACES: .005	1/32	CHECKED	
PLACES: .002	1/64	PLACES: .002	1/64	APPROVED	
PLACES: .001	1/128	PLACES: .001	1/128	APPROVED	

MATERIAL: _____

COAXIAL SWITCH, SP8T, TYPE "N", FAILSAFE, TTL, W/INDICATORS, HIGH POWER

SCALE: B 09080 UNIT: MT SHEET: B 10282-3 OF: 1

HOTC18ZNF91



HIGH POWER COAXIAL SWITCHES, TYPE "N"

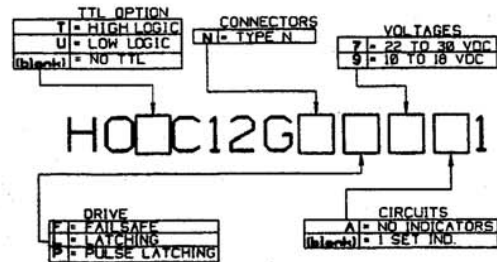
HOC12G SERIES

SPDT Relay style DC to 4 GHz family.

The HC12G series offers reliability and performance in SPDT switching utilizing High Power "N" connector styles.

This DC to 4 GHz series covers typical applications in telecommunications, cellular, mobile radio and ATE.

The following pages comprise a variety of sample models commonly used.



4 POS 1 INDICATOR CIRCUITRY
 5 IND COM
 6 POS 2

1 VDC NORMAL VOLTAGE
 3 -RETURN
 2 POS 2 TTL CONTROL
 1 POS 1

SCHMATIC DIAGRAM SHOWN IN POSITION 1

SPECIFICATIONS MICROWAVE

FREQUENCY RANGE GHz	DC TO 0.5	0.5 TO 1	1 TO 2	2 TO 3	3 TO 4
V.S.W.R. MAX	1.10:1	1.15:1	1.2:1	1.3:1	1.4:1
INSERTION LOSS MAX	0.2 dB	0.2 dB	0.2 dB	0.3 dB	0.4 dB
ISOLATION MIN	20dB	20dB	20dB	20dB	20dB
POWER MAX CW	100W	100W	100W	100W	100W

IMPEDANCE: 50 OHM

ELECTRICAL:
 VOLTAGE: 22 TO 30 VDC
 CURRENT: 150 mA MAX @ 20 VDC @ 20°C
 TTL LOGIC: VOLTAGE LOW: 0 TO 0.8 VDC
 VOLTAGE HIGH: 2.4 TO 5.5 VDC
 CURRENT LOW: 0 mA
 CURRENT HIGH: 1.75 mA MAX @ 5 V

SWITCHING TIME: 20 MILLISECONDS MAX.

MECHANICAL:
 MATERIAL: ALUMINUM (RF ASSY)
 RF CONTACTS: BREAK-BEFORE MAKE
 FINISH: IRIDIUM PER MIL-C-5541
 PAINT: DULL BLACK ENAMEL
 LIFE: 1,000,000 CYCLES MIN.

ENVIRONMENTAL:
 TEMP.: OPERATING 0°C TO +70°C
 NON-OPERATING -40°C TO +100°C
 HUMIDITY: 0 TO 95% NO CONDENSATION

REVISIONS				
REV	DATE	DESCRIPTION	BY	APP'D

CONNECTOR TYPE "N" (FEMALE) 3 PLACES
 .148 DIA THRU 4 HOLES

2.44
 2.48
 .200
 .388
 .63 MAX
 2.58
 2.75

MODEL #	HOC12GNL71		
DATE	DESIGNED	APPROVED	DATE
8/12/98	8/28/98	8/28/98	8/28/98
DESIGNED BY	HIGH POWER COAXIAL SWITCH, SPDT, TYPE "N", LATCHING, TTL W/INDICATORS		
APPROVED BY	B 09080 B 10131-4		
SCALE	UNIT	SHEET 1 OF 1	

HOC12GNL71