

Switches for TCAS & ADS-B Applications



ARINC 718 Mode TCAS Switches

Ducommun provides five standard TCAS series model numbers: D2-729B001, D2-729B002, D2-729B003, D2-729B005 and D2-723Q001. All SPDT switches are designed for high frequency RF signals between the top and bottom fuselage mounted antennas and numbers 1 and 2 system transponders.

These switches are directly applicable to all TCAS systems, such as Honeywell and Rockwell Collins.

- FMA PMA certified switches for TCAS and ADS-B applications
- Air agency certificate no.: D5YR708X
- Additional microwave switch applications – SATCOM and GPS applications

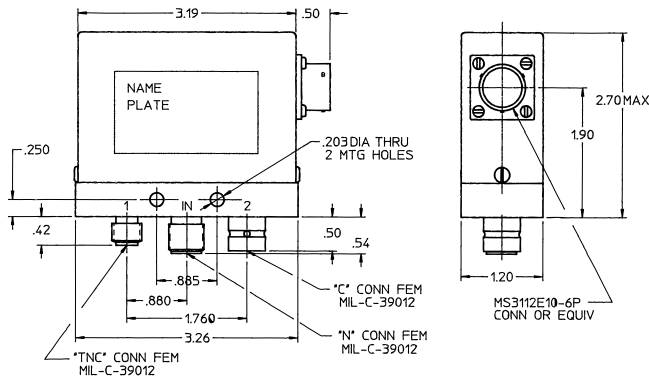
Specifications

	D2-729B001	D2-729B002	D2-729B003	D2-729B005	D2-723Q001
Operating frequency (GHz)	DC - 2	DC - 2	DC - 2	DC - 2	DC - 1
V.S.W.R	1.3:1	1.3:1	1.3:1	1.3:1	1.25:1
Insertion loss (Max)	0.25 dB	0.25 dB	0.25 dB	0.25 dB	0.2 dB
Isolation (Min)	60 dB	60 dB	60 dB	60 dB	90 dB
Actuating voltage (Vdc) (28 Vdc nominal)	22 - 30	22 - 30	22 - 30	22 - 30	24 - 30
Actuating current (400 mA Max @)	28 Vdc & 20°C	28 Vdc & 20°C	28 Vdc & 20°C	30 Vdc & 20°C	28 Vdc & 72°C
Impedance (Ohms)	50	50	50	50	50
Switching time (mS Max)	35	35	35	35	20
RF power handling (WCW)	200	200	200	200	200 (10W Terminated)
Operating mode	Failsafe w/ indicators	Failsafe w/ indicators	Failsafe w/ indicators	Failsafe w/ indicators	Failsafe w/ indicator suppression diodes
Operating temperature (°C)	-35 to +71	-35 to +71	-36 to +71	-36 to +85	-15 to +55
Operating life (cycles)	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Current of ground port B and C (mA Max)	5	5	5	5	5
Connectors per MIL-C-39012	P1> TNC (F) P2> N (F) P3> C (F)	P1> TNC (F) P2> N (F) P3> C (F)	P1> TNC (F) P2> N (F) P3> C (F)	P1> TNC (F) per P2> N (F) P3> C (F)	P1> TNC (M) P2> C (F) P3> N (F)
Weight	11.5 oz	11.5 oz	11.5 oz	350 grams	7.5 oz

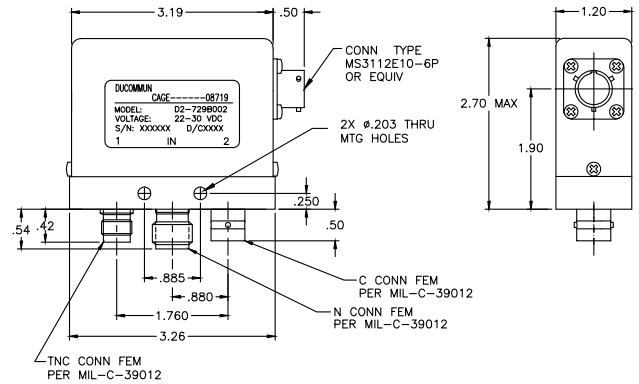
Additional TCAS models and configurations are available.

For more information, contact our sales team at 310.513.7200 or rfsales@ducommun.com

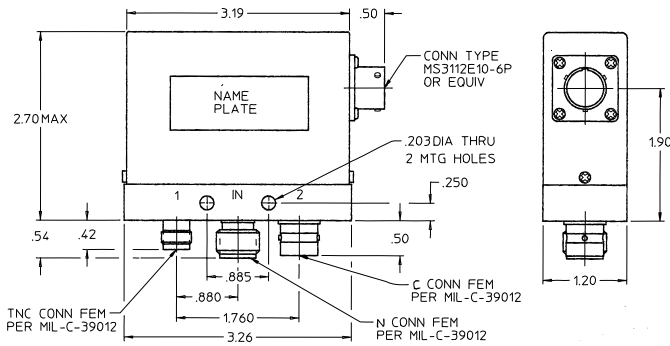
OUTLINE DRAWINGS



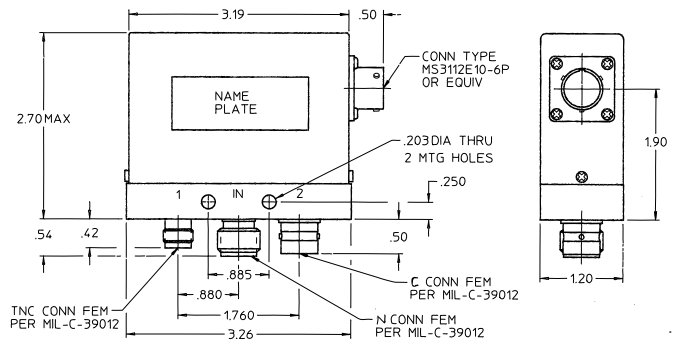
Part Number D2-729B001



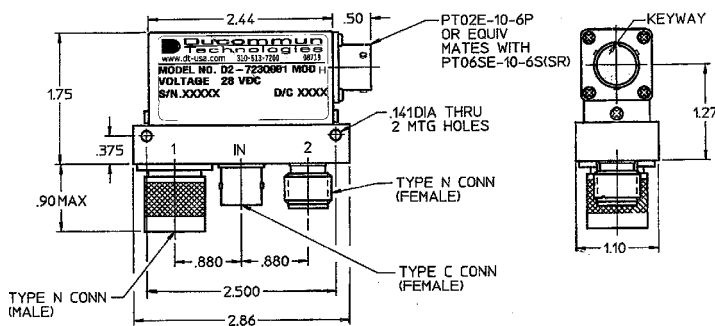
Part Number D2-729B002



Part Number D2-729B003



Part Number D2-729B005



Part Number D2-723Q001

Typical Actuation Commands

Control ground PIN C	RF Path
Ground off > 100K in series with 0 to 3.5V	IN-1
Ground on 0 to +3.5V	IN-2

All specifications are subject to change without notice.

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