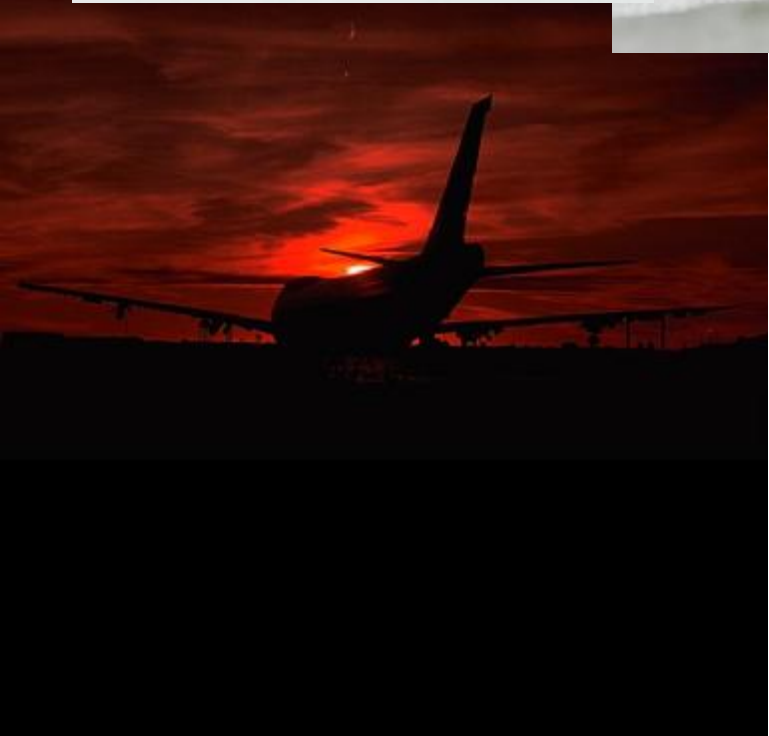
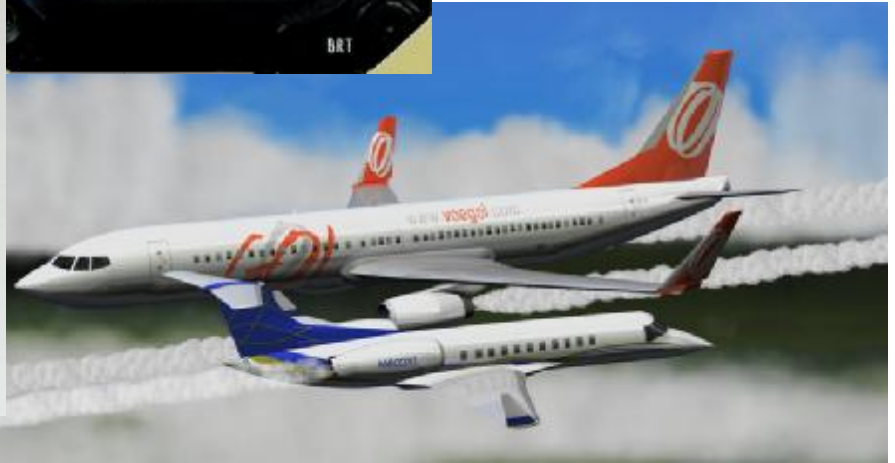


R F / MICROWAVE

Traffic Collision Alerting System (TCAS) Switch



TCAS

Model numbers D2-729B001, D2-729B002, D2-729B003, D2-729B005 and D2-723Q001 SPDT, switches 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**



	D2-729B001	D2-729B002	D2-729B003	D2-729B005	D2-729C001
Contact Arrangement	SPDT	SPDT	SPDT	SPDT	SPDT
Operating Frequency	DC to 2 GHz	DC to 2 GHz	DC to 2 GHz	DC to 3 GHz	DC to 1 GHz
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	0.25 dB
Isolation (min)	60 dB	60 dB	60 dB	80 dB	90 dB
Actuating Voltage	22 – 30 Vdc (28 Vdc nominal)	22 – 30 Vdc (28 Vdc nominal)	22 – 30 Vdc (26 Vdc nominal)	22 – 30 Vdc (26 Vdc nominal)	24 – 30 Vdc (26 Vdc nominal)
Actuating Current	400 mA max @ 28 Vdc & 20° C	400 mA max @ 28 Vdc & 20° C	400 mA max @ 28 Vdc & 20° C	400 mA max @ 30 Vdc & 20° C	140 mA max @ 28 Vdc & 72° C
Impedance	50 Ohms	50 Ohms	50 Ohms	50 Ohms	50 Ohms
Switching Time	35 mS max	35 mS max	35 mS max	35 mS max	20 mS max
RF Power Handling	200 W CW	200 W CW	200 W CW	115 W CW	200 W CW 10W Terminated
Operating Mode	Failsafe with indicators	Failsafe with indicators	Failsafe with indicators	Failsafe to Position 1, Terminated to 50 Ω, Suppression Diodes	Failsafe with indicators Suppression Diodes
Operating Temperature	-36°C to +71°C	-36°C to +71°C	-36°C to +71°C	-35°C to +85°C	-15°C to +55°C
Operating Life	1,000,000 cycles	1,000,000 cycles	1,000,000 cycles	1,000,000 cycles	1,000,000 cycles
Current of ground port B and C	5 mA (max)	5 mA (max)	5 mA (max)	5 mA (max)	5 mA (max)
Connectors	P1 > TNC (F) per MIL-C-39012 P2 > N (F) per MIL-C-39012 P3 > C (F) per MIL-C-39012	P1 > TNC (F) per MIL-C-39012 P2 > N (F) per MIL-C-39012 P3 > C (F) per MIL-C-39012	P1 > TNC (F) per MIL-C-39012 P2 > N (F) per MIL-C-39012 P3 > C (F) per MIL-C-39012	TNC (F) per MIL-C-39012	P1 > TNC (M) per MIL-C-39012 P2 > C (F) per MIL-C-39012 P3 > N (F) per MIL-C-39012
Weight	11.5 oz	11.5 oz	11.5 oz	350 grams	7.5 oz
Mechanical Figure	1	2	3	4	5

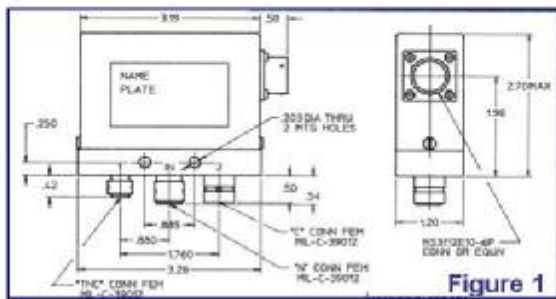


Figure 1

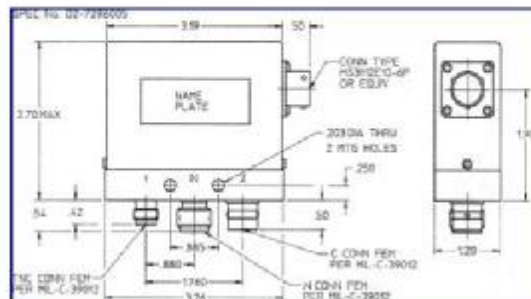


Figure 2

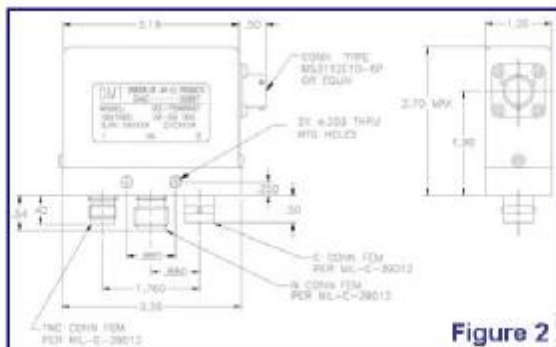


Figure 3

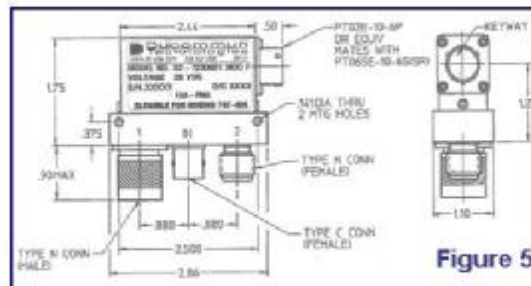
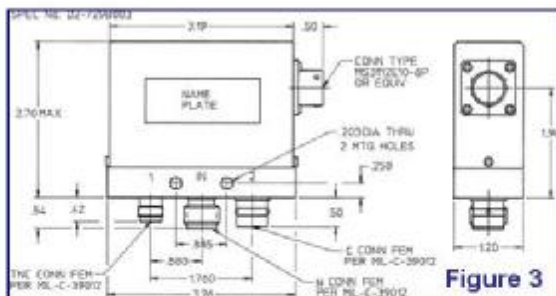


Figure 5



Typical Actuation Com-

ACTUATION COMMANDS	
CONTROL GROUND PIN C	RF PATH
GROUND OFF	IN-1
>100K IN SERIES WITH 0 TO 3.5V	
GROUND ON	IN-2
0 TO +3.5V	

Other models and configurations are available.
Please contact Factory.

About Us

Founded in 1849, Ducommun Incorporated provides engineering and manufacturing services for the aerospace and defense industry. A key part of the Ducommun family of businesses, Ducommun Technologies, Inc. is a leading technology company with design, development, manufacturing, integration and test capabilities in the areas of missiles, space, sensor, simulation, complex electronic/mechanical assemblies, illuminated cockpit displays, RF to millimeter wave components to sub-systems and space-qualified motion control devices.

Ducommun Technologies coaxial switch heritage begins with Jay-El and Dynatech (DMT), founded in 1969 and acquired by the company in the early 1990's. To further strengthen its product offering, the company subsequently acquired DB Products (DBP) in 2004 and WiseWave Technologies in 2006.

Today Ducommun Technologies is a powerhouse serving the avionics, commercial, industrial, defense, medical, telecommunications and space up-link & down-link market sectors with a wide range of coaxial switch products.

Ducommun Technologies customers have chosen Ducommun switch products for its unique comprehensive understanding of electro-mechanical switches principals, along with a singular dedication to reliability, quality and focus on providing great customer service.

If it's standard or off-the-shelf commercial switch your looking for or if your needs are for a highly customized ruggedized switch, Ducommun Technologies has the ability to design and deliver.



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