

# XFU4 Transfer Switch

Double Pole, Double Throw

**COBHAM**

Data Sheet Revision Date: 12/16/2015

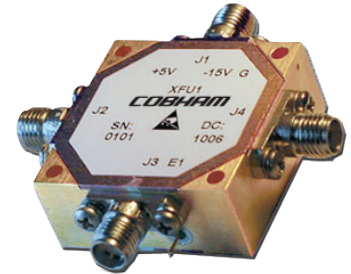
The most important thing we build is trust

## DESCRIPTION:

The XF series of PIN diode transfer switches span the frequency range of 10MHz to 18GHz. The switches are available in a wide variety of standard frequency ranges from cost-effective narrowband to high-performance broadband.

Each switch incorporates a TTL-compatible driver for convenient system integration and operates from +5V and -12V to -18V DC power supplies. All switches incorporate DC blocks at the RF ports. Standard screened switches incorporate epoxy sealed lids and undergo a stringent yet cost effective screening cycle.

The switches are also available with hermetic seal and high-rel screening for military and aerospace applications.

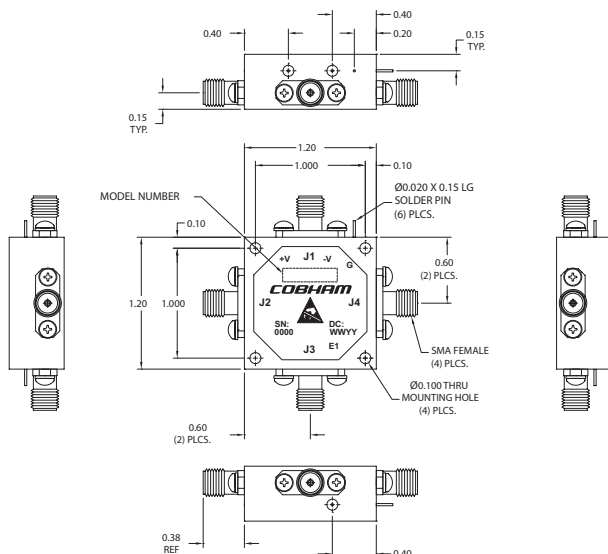


## SPECIFICATIONS:

Parameter	Specification	Unit of Measure
Frequency Range	0.5 – 6	GHz
Insertion Loss (max)	2.4	dB
VSWR (max) (50 ohms)	1.9	ratio
Isolation (min)	75	dB
Switching Speed (max)	100	nsec
CW RF Power, Survival	30	dBm
P1dB*	27	dBm

\*Standard bias configuration

## OUTLINE DRAWING:



OUTLINE CASE STYLE XF

## FEATURES:

- TTL-compatible drivers for convenient system integration
- Operates on +5V or +15V and -5V or -15V DC power supplies (see ordering information)
- DC blocks at all RF ports
- Ruggedized construction
- Hermetic versions available
- All parts receive internal visual (per MIL-STD-883) and temp cycle (-40 °C to 100 °C, 10 cycles)
- Hi-Rel screening available upon request
- 30-day lead time on some configurations (contact factory for details)

## NOTES:

DC Bias: (Standard)	+5 V +/- 0.5 V @ 100 mA max -15 V +/- 3 V @ 100 mA max
DC Bias: (-5 option)	+5 V +/- 0.5 V @ 120 mA max -5 V +/- 0.5 V @ 100 mA max
DC Bias: (-12 option)	+15 V +/- 3 V @ 120 mA max -15 V +/- 3 V @ 100 mA max
Control:	TTL 0: J1-J2, J3-J4 Low Loss J1-J4, J2-J3 Isolation
	TTL 1: J1-J4, J2-J3 Low Loss J1-J2, J3-J4 Isolation

Switching speed is defined as 50% TTL to 90% RF (t-on) and 50% TTL to 10% RF (t-off).

Finish: Gold Plate per MIL-G-45204  
Chem film per MIL-C-5541

Weight: 35 g max

## ENVIRONMENTAL SPECIFICATIONS\*:

MIL-E-5400, MIL-STD-202, MIL-E-16400
Operating Temp: -40 °C to +71 °C
Storage Temp: -65 °C to +125 °C
Humidity: MIL-STD-202F, M103, Cond B
Shock: MIL-STD-202F, M213, Cond B
Altitude: MIL-STD-202F, M105, Cond B
Vibration: MIL-STD-202F, M204, Cond B
Thermal Shock: MIL-STD-202F, M107, Cond A

\* Compliant by design, verification optional

## PART NUMBER ORDERING INFORMATION:

- Add "-RC" suffix: RoHS-compliant
- Add "-H" suffix: Hermetic seal
- Add "-5" suffix: +/- 5V DC supplies
- Add "-5-RC" suffix: +/- 5V DC supplies, RoHS-compliant
- Add "-5-H" suffix: +/- 5V DC supplies, Hermetic seal
- Add "-12" suffix: +/- 15V DC supplies
- Add "-12-RC" suffix: +/- 15V DC supplies, RoHS-compliant
- Add "-12-H" suffix: +/- 15V DC supplies, Hermetic seal

### ISO 9001:2008 and AS9100 certified

Aeroflex Control Components, DBA Cobham Signal & Control Solutions (CSCS) reserves the right to make changes to any products and services herein at any time without notice. Consult CSCS or an authorized sales representative to verify that the information in this data sheet is current before using this product. CSCS does not assume any responsibility or liability arising out of the application or use of any product or service described herein, except as expressly agreed to in writing by CSCS; nor does the purchase, lease, or use of a product or service from CSCS convey a license under any patent rights, copyrights, trademark rights, or any other of the intellectual rights of CSCS or of third parties.

Copyright 2015, Cobham Signal & Control Solutions. All rights reserved.

### For further information please contact:

**Cobham Signal & Control Solutions**  
40 Industrial Way East  
Eatontown, NJ 07724 [USA]  
Phone: (732) 460-0212  
Fax: (732) 460-0214  
ASCS-sales@aeroflex.com