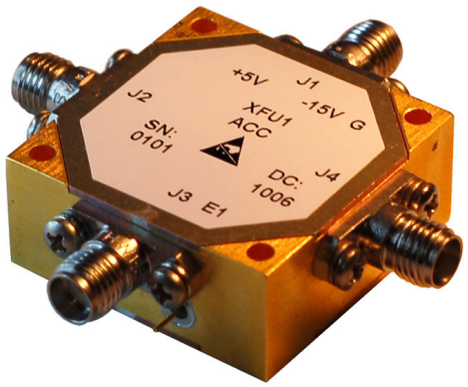
TRANSFER SWITCHES

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.



Applications:

- EW Systems
- Communications Systems
- Diversity Control
- Test Equipment
- Electronic Simulators

Frequency Range (GHz)	Part Number	Insertion Loss (dB max)	VSWR (max)	Isolation (dB min)	Switching Speed (nsec max)	MAX RF (W CW)
0.01 – 0.1	**XFH1**	0.8	1.5	80	250	1
0.01 – 0.5	**XFH2**	1.0	1.5	80	250	1
0.01 – 1	**XFH3**	1.3	1.5	80	250	1
0.01 – 2	**XFH4**	1.9	1.6	80	250	1
0.01 – 4	**XFH5**	2.7	1.8	80	250	1
0.1 – 0.5	**XFV1**	1.0	1.5	80	250	1
0.1 – 1	**XFV2**	1.3	1.5	80	250	1
0.1 – 2	**XFV3**	1.9	1.6	80	250	1
0.1 – 4	**XFV4**	2.7	1.8	80	250	1
0.1 – 8	**XFV5**	3.4	2.0	75	250	1
0.1 – 10	**XFV6**	3.7	2.0	75	250	1
0.5 – 1	**XFU1**	1.1	1.5	80	100	1
0.5 – 2	**XFU2**	1.5	1.6	80	100	1
0.5 – 4	**XFU3**	2.1	1.8	75	100	1
0.5 – 6	**XFU4**	2.4	1.9	75	100	1
0.5 – 12	**XFU5**	2.8	2.0	70	100	0.5
0.5 – 18	**XFU6**	3.3	2.0	65	100	0.5
1 – 2	**XFL1**	1.0	1.5	80	100	1
1 – 4	**XFL2**	1.3	1.6	80	100	1
1 – 8	**XFL3**	2.0	1.8	80	100	1
1 – 10	**XFL4**	2.1	2.0	75	100	1
1 – 12	**XFL5**	2.2	2.0	70	100	0.5
1 – 14	**XFL6**	2.6	2.0	70	100	0.5
1 – 18	**XFL7**	3.1	2.0	65	100	0.5
2 – 4	**XFS1**	1.2	1.6	75	100	1
2 – 6	**XFS2**	1.5	1.7	75	100	1
2 – 8	**XFS3**	1.9	1.8	75	100	1
2 – 10	**XFS4**	2.0	1.8	70	100	1
2 – 12	**XFS5**	2.2	1.9	70	100	0.5
2 – 16	**XFS6**	2.9	2.0	65	100	0.5
2 – 18	**XFS7**	3.1	2.0	65	100	0.5
4 – 8	**XFC1**	1.9	1.6	75	100	1
4 – 10	**XFC2**	2.1	1.7	70	100	1
4 – 12	**XFC3**	2.2	1.8	70	100	0.5
4 – 16	**XFC4**	2.9	2.0	65	100	0.5
4 – 18	**XFC5**	3.0	2.0	65	100	0.5
6 – 10	**XFC6**	2.1	1.7	70	100	1
6 – 12	**XFC7**	2.2	1.8	70	100	0.5
6 – 18	**XFC8**	3.0	2.0	65	100	0.5
8 – 10	**XFX1**	2.1	1.7	70	100	0.5
8 – 12	**XFX2**	2.2	1.8	70	100	0.5
8 – 18	**XFX3**	3.0	2.0	65	100	0.5
10 – 18	**XFK1**	3.0	2.0	65	100	0.5
12 – 18	**XFK2**	3.0	2.0	65	100	0.5

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NOTES:

DC Bias:	+5V +/-0.5V @ 100mA max	
(Standard)	-15V +/-3V @ 100mA max	
DC Bias:	+5V +/-0.5V @ 120mA max	
(-5 option)	-5V +/-0.5V @ 120mA max	
DC Bias:	+15V +/-3V @ 100mA max	
(-12 option)	-15V +/-3V @ 100mA 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% (t-on) and 50%TTL to 10%RF (t-off).

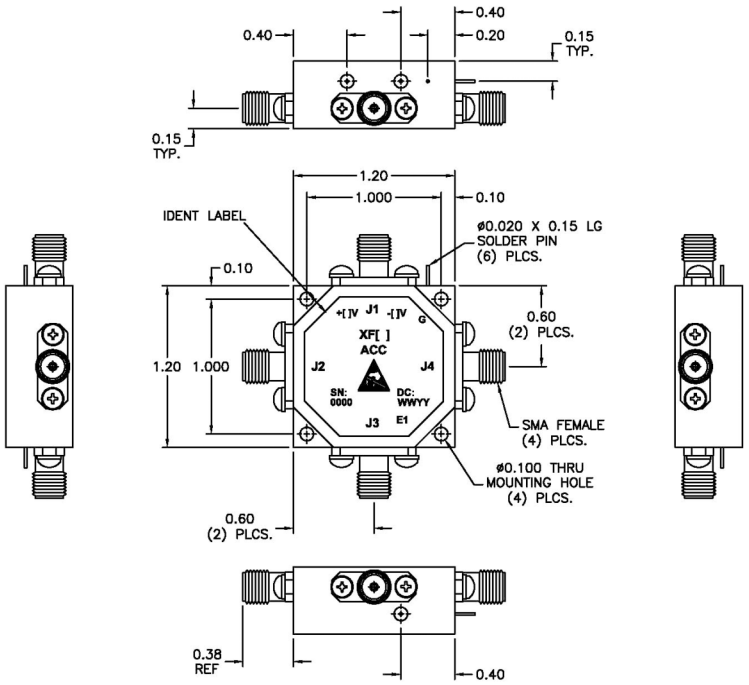
ENVIRONMENTAL SPECIFICATIONS:
MIL-E-5400, MIL-STD-202, MIL-E-16400
Operating Temp: -55°C to +85°C
Storage Temp: -65°C to +125°C
Humidity: MIL-STD-202F, M103, Cond B
Shock: MIL-STD-202F, M213, Cond B
Altitude: MIL-STD-202F, M105, Cond B
Vibration : MIL-STD-202F, M204, Cond B
Thermal Shock: MIL-STD-202F, M107, Cond A
Temperature Cycle: MIL-STD-202F, M105C, Cond D

MECHANICAL SPECIFICATIONS:
Case Style: XF Outline
Finish: Gold plate per MIL-G-45204, Chem film per MIL-C-5541
Connectors: SMA Female per MIL-C-39012
Bias & Control Pins: ø0.02" x 0.15" long
Weight: 35g max
Mounting: ø0.10" through holes (4) places

SCREENING:
Internal Visual per MIL-STD-883, Method 2017
Temperature Cycle: -65°C to +100°C, 10 cycles

Hermetically-sealed switches are fine and gross leak checked per MIL-STD-883, Method 1014.

Optional High-Rel screening available upon request.
Contact the factory to discuss your screening requirements.



OUTLINE CASE STYLE XF

PART NUMBER ORDERING INFORMATION:

- Add "-RC" suffix: RoHS-compliant
- Add "-5" suffix: +/-5V DC supplies
- Add "-5-RC" suffix: +/-5V DC supplies, RoHS-compliant
- Add "-12" suffix: +/-12V to 18V DC supplies
- Add "-12-RC" suffix: +/-12V to 18V DC supplies, RoHS-compliant
- Add "-H" suffix: Hermetic seal (does not apply to RoHS-compliant models)

CUSTOM OPTIONS – CONTACT FACTORY:

- Gray epoxy paint per MIL-C-22750
- Video transient suppression
- GPO connectors
- ECL logic input
- Phase and amplitude matching
- Other frequency ranges available from 1MHz to 26GHz
- Reversed logic
- Available without SMA connectors for drop-in applications
- High rel screening

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