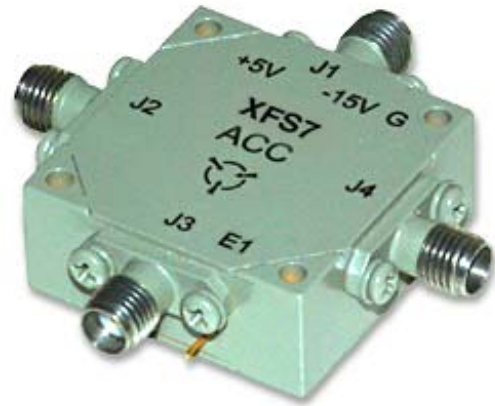


The XF series of PIN diode transfer switches span the frequency range of 10MHz to 18GHz. The switches are available in a wide variety of standard frequency ranges from cost-effective narrowband to high-performance broadband. Each switch incorporates a TTL-compatible driver for convenient system integration 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 mil and space 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	1
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	1
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

NOTES:

DC Bias: +5V +/-0.5V @ 100mA max
 -15V +/-3V @ 100mA max
 DC Bias: +5V +/-0.5V @ 120mA max
 (-5 option) -5V +/-0.5V @ 120mA 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

ENVIRONMENTAL SPECIFICATIONS:

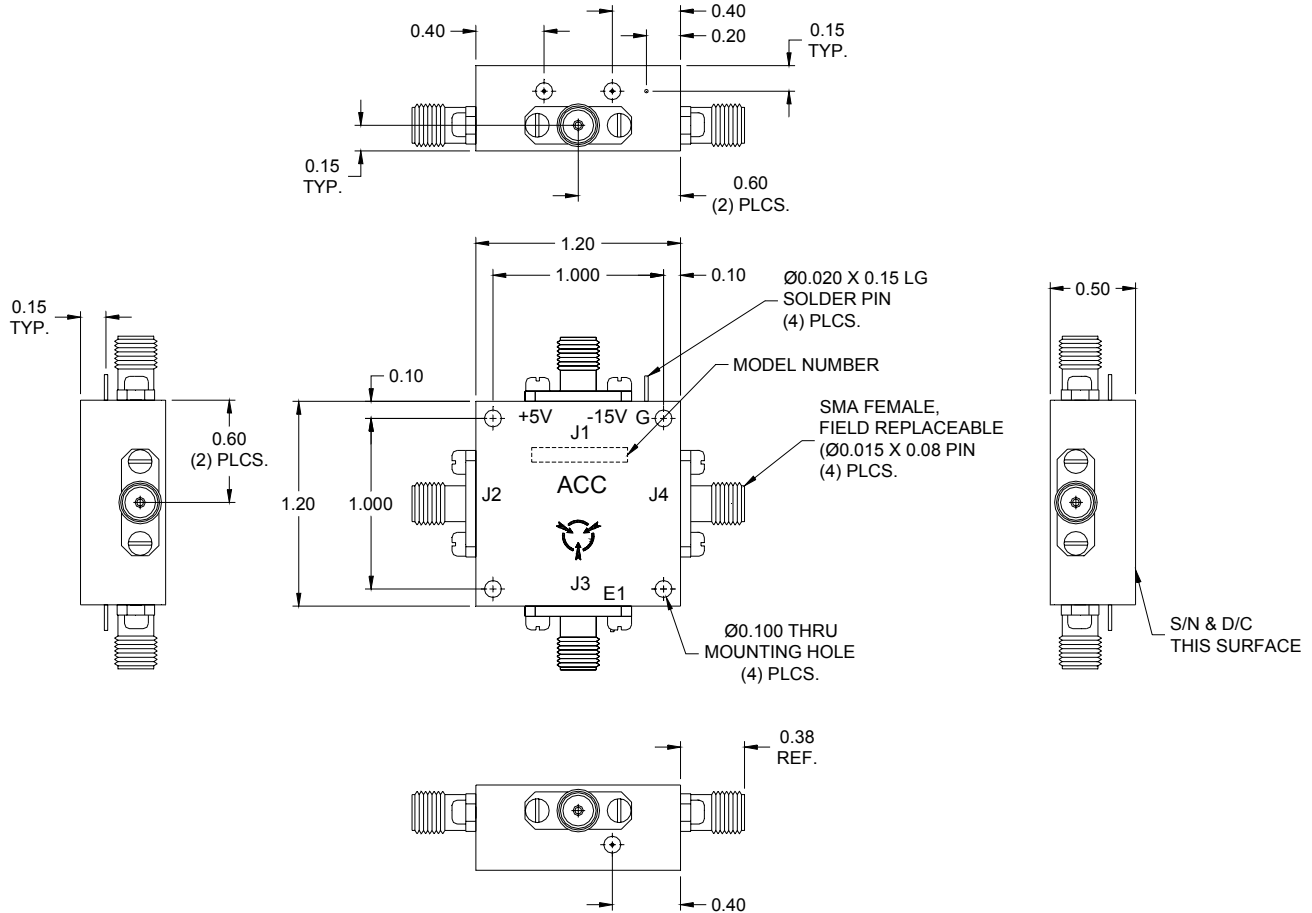
MIL-E-5400, MIL-STD-202, MIL-E-16400
 Operating Temp: -55°C to +85°C
 Storage Temp: -65°C to +125°C
 Humidity: MIL-STD-202F, M103, Cond B
 Shock: MIL-STD-202F, M213, Cond B
 Altitude: MIL-STD-202F, M105, Cond B
 Vibration: MIL-STD-202F, M204, Cond B
 Thermal Shock: MIL-STD-202F, M107, Cond A
 Temperature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

MECHANICAL SPECIFICATIONS:

Case Style: X1 Outline
 Finish: Gray Epoxy Paint per MIL-C-22750
 Connectors: SMA Female per MIL-C-39012
 Bias & Control Pins: $\varnothing 0.02$ " x 0.15" long
 Weight: 35g max
 Mounting: $\varnothing 0.10$ " through holes (4) places

SCREENING :

Standard Screening:
 Internal Visual per MIL-STD-883, Method 2017
 Temperature Cycle: -65°C to +100°C, 10 cycles
Optional High-Rel Screening (Ref MIL-PRF-38534):
 Internal Visual per MIL-STD-883, Method 2017
 Stabilization Bake per MIL-STD-883, Method 1008
 Temperature Cycle per MIL-STD-883, Method 1010
 Constant Acceleration per MIL-STD-883, Method 2001
 Burn-in per MIL-STD-883, Method 1015
 Leak Test per MIL-STD-883, Method 1014
 External Visual per MIL-STD-883, Method 2009



OUTLINE CASE STYLE XF

OPTIONS:

- Other frequency ranges available from 1MHz to 26GHz
- Reversed logic
- Available without SMA connectors for drop-in applications
- Hermetic seal (Add "H" to part number)
- Supply voltage options: +/-5V, +/-12V, +/-15V
- Video transient suppression
- GPO connectors
- ECL logic input
- Port-to-port and/or unit-to-unit phase and amplitude tracking

* Contact the factory for price and delivery or to discuss custom requirements

XF-0205