

### Features:

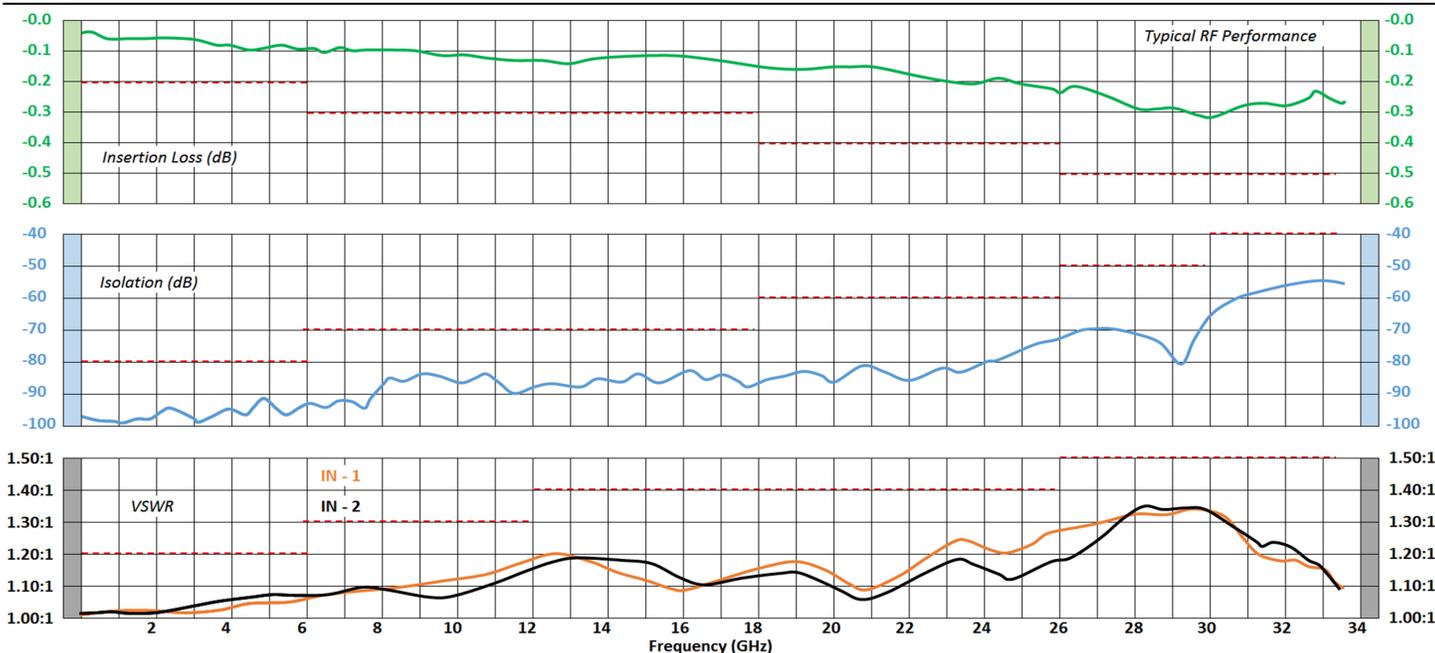
- Broadband: DC - 33.5 GHz
- Extended Life: 2 million cycles
- Excellent Repeatability
- Low Insertion Loss
- High Isolation



### RF Specification:

Frequency, (GHz)	DC - 6	6 - 12	12 - 18	18 - 26	26 - 31	31 - 33.5	Operation	
Ins. Loss dB (max)	0.2	0.3	0.3	0.4	0.5	0.5	Switching Time	20 mS (max)
Isolation dB (min)	80	70	70	60	50	40	Switching Action	Break-Before-Make
VSWR (max)	1.20:1	1.30:1	1.40:1	1.40:1	1.50:1	1.50:1	Impedance	50 Ω

**Description:** Adding external 50Ω terminations ensures good isolation in the “off” state regardless of the match to which the switch is connected. Combined with repeatability and low insertion loss makes these switches ideal for all testing applications. Good low to medium RF power handling. A wide selection of features are available. **Applications:** Bench testing, ATE stations, broadband transceivers, antenna systems. **Markets:** government, telecom, aerospace, enterprise, consumer and IoT.



Specifications	
Oper Temp	-25° C to +70° C
Oper Temp	-54° C to +85° C (ruggedized version)
Storage Temp	-55° C to +100° C
Humidity	Moisture resistant or immersion sealing available
Shock	MIL-STD-202 Method 213, Condition D, 500G (non oper)
Vibration	MIL-STD-202 Method 214, Condition D, 10G RMS (non oper)
Cycle Life	2M cycles (may vary based on selected options)

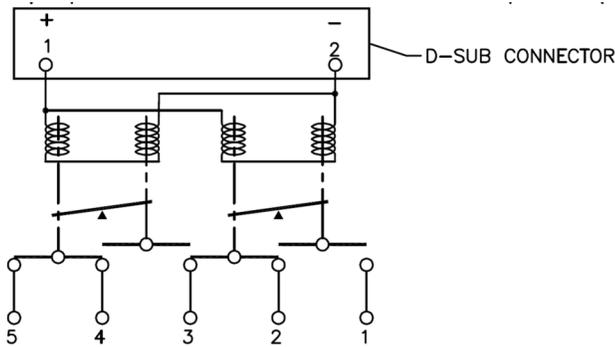
Voltages and Current					
Nominal Voltage, Vdc	5	12	15	24	28
Voltage Range, Vdc	4.5-6	11-13	14-16	22-26	26-30
Current (mA)*	470	200	160	110	90

\* at nominal voltage and +20°C

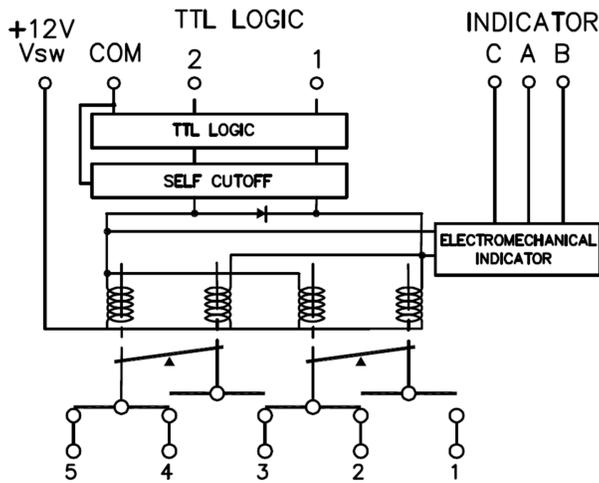
Popular Models	
23E-M2F3-3312	SPDT, 2.92, Failsafe, Indicators, DC-33.5GHz, 12VDC
23E-M2F2-3312	SPDT, 2.92, Failsafe, DC-33.5GHz, 12VDC
23E-M2F3-3312	SPDT, 2.92, Failsafe, Indicators, DC-33.5GHz, 12VDC
23E-M2F3-3312-F	SPDT, 2.92, Failsafe, Indicators, DC-33.5GHz, 12VDC, D-Sub
23E-M2F4-3312-T	SPDT, 2.92, Failsafe, +com, DC-33.5GHz, 12VDC, TTL
23E-M2F3-3324-T	SPDT, 2.92, Failsafe, Indicators, DC-33.5GHz, 24VDC, TTL
23E-M2F3-3328-T	SPDT, 2.92, Failsafe, Indicators, DC-33.5GHz, 28VDC, TTL

- See backside for a full list of available features and options
- Contact us for high power and custom designs

### Schematics:

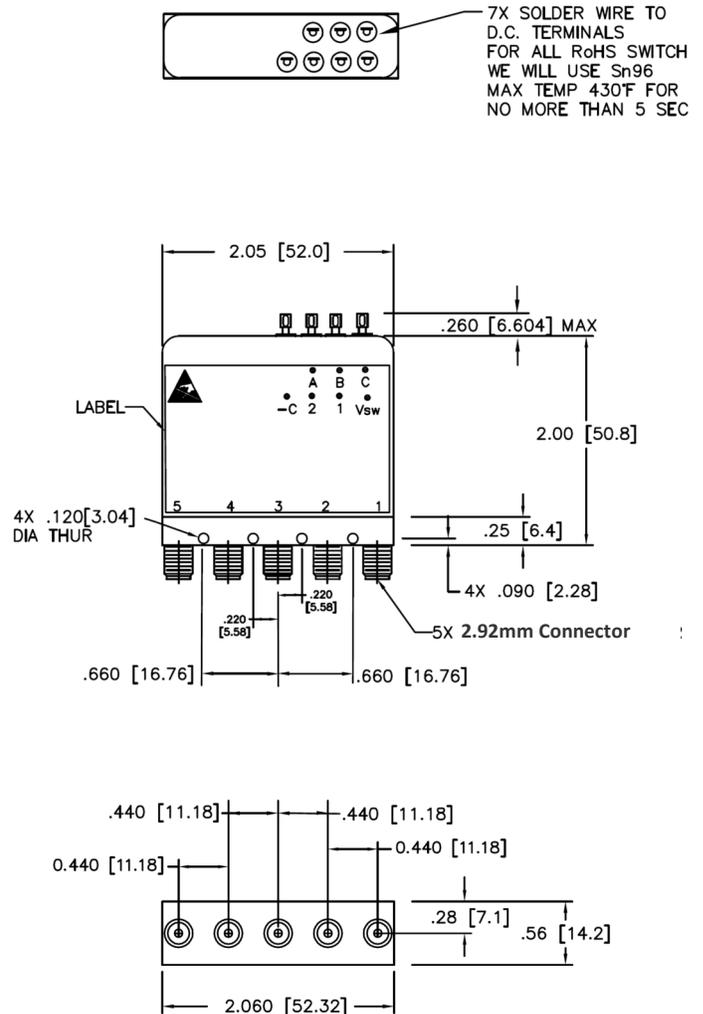


Standard w/D-Sub



TTL + Self Cutoff and Indicators

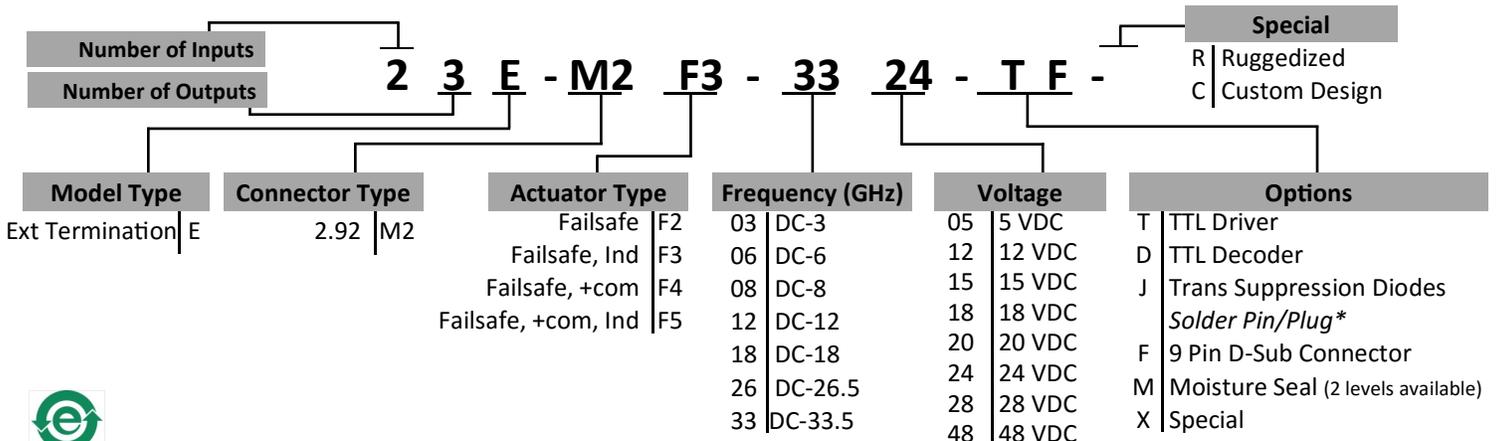
### Outline:



### Model Numbering System

Example: 23E-M2F3-3324-TF

(2P3T, Standard, 2.92, Failsafe w/indicators, DC-33.5GHz, 24VDC, TTL, D-Sub)



\* Solder pins are standard for SPDT, no designation on model number needed

