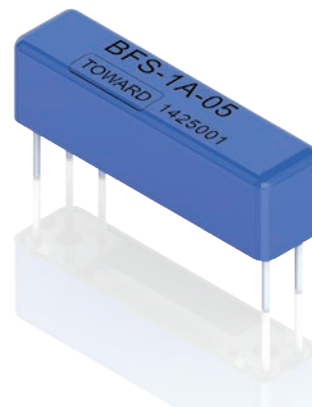


# BFS Series

## 1a, 1c Reed Relays

### Features

- High reliability reed relays.
- High Insulation Resistance.
- High speed switching compared to electromechanical relays.
- Hermetically sealed contacts for long life.
- Optional electrostatic shield for reducing capacitive coupling.
- Optional coaxial shield for 50Ω impedance and switching of fast rise time digital pulses.
- RoHS compliant.



### Order Code

BFS- XX-XX X X  
           a   b c d

a : Contact Form : 1A=1 Form A, 1C=1 Form C  
 b : Nominal Coil Voltage : 05=5VDC, 12=12VDC  
 c : Nil=No Electrostatic Shield, E=Electrostatic Shield (For 1A type only)  
     C=Coaxial Shield (For 1A type only)  
 d=Nil=Standard Type, Y=Special Pin Assignment

### Coil Data-Standard Type (at 20°C)

Part Number	Nominal Voltage DC ± 10% [V]	Coil Resistance ± 10% [ohm]	Nominal Current [mA]	Must Release Voltage MIN. [V] at 20°C	Must Operate Voltage MAX. [V] at 20°C
<b>BFS-1A</b>	5	370	13.5	0.4	3.8
	12	1500	8	1.0	9.0
<b>BFS-1C</b>	5	230	22	0.4	3.8
	12	1500	8	1.0	9.0

### Contact Specifications

Contact Form	1 Form A	1 Form C
Contact Rating	10W	3W
Max.Switching Voltage	200V	100V
Max.Switching Current	0.5A	0.25A
Max.Carry Current	1.0A	0.5A
Max.Static Contact Resistance	100mΩ	150mΩ
Max.Dynamic Contact Resistance	200mΩ	200mΩ



### Electrical Specifications

Contact Form	1 Form A	1 Form C
Breakdown Voltage Between contacts contact to shield contact / shield to coil	250VDC	200VDC
	250VDC	N/A
	1500VDC	1500VDC
Insulation Resistance	10 <sup>12</sup> Ω	10 <sup>11</sup> Ω
Capacitance	0.9pF	0.9pF
Operate Time Including bounce - Typical	0.5mS	1.0mS
Release Time	0.1mS	2.0mS

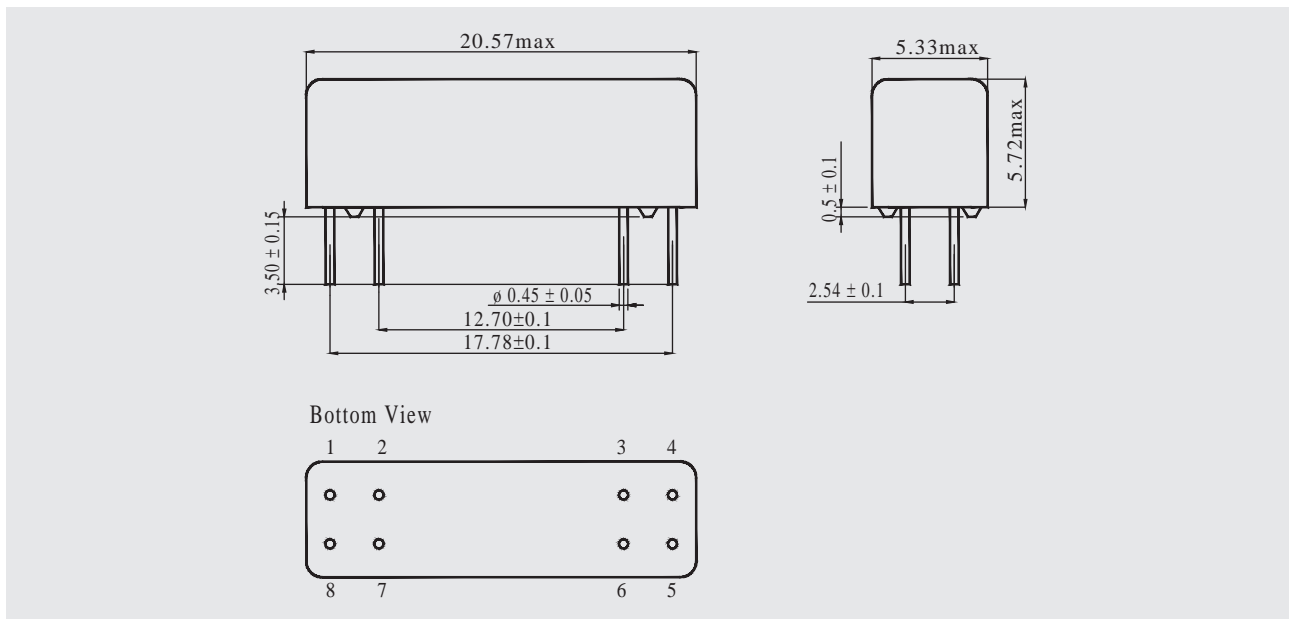
### Mechanical Specifications

Vibration (0 to 2KHz 1.5mm )	20G
shock (11mS 1/2 Sin Wave)	50G

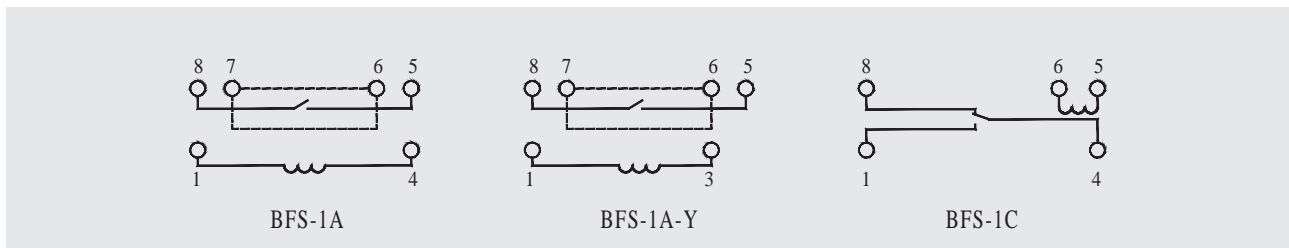
### Environmental

Operating Temp	-25°C ~+85°C
Storage Temp	-35°C ~+100°C
Life Expectancy (1.0VDC 10mA)	5X10 <sup>8</sup> 1X10 <sup>8</sup>

### Dimensions (Unit : mm)



### Wiring Diagrams (Top View)



Notes: Model BFS-1A ; pin#3 is tied to optional electrostatic shield, pin #2 & #3 are tied to optional coaxial shield.  
Model BFS-1A-Y; pin#7 is tied to optional electrostatic shield, pin #6 & #7 are tied to optional coaxial shield.