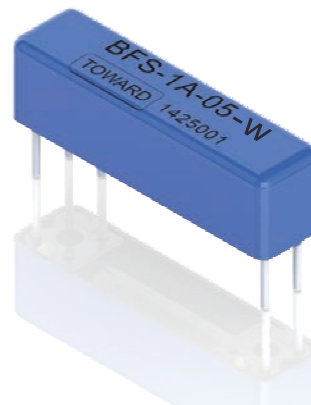


# BFS Series

## 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 coaxial shield for 50Ω impedance and switching of fast rise time digital pulses.
- Wide operating temperature rang - 40 °Cto +125 °C.
- RoHS compliant.



### Order Code

BFS- XX-XX X -W  
           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 Coaxial Shield, C=Coaxial Shield (For 1A type only)  
 d : W=Wide Operating Temperature Range

### Coil Date-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
BFS-1A-W	5	100	50.0	0.4	2.5
	12	550	21.8	1.0	6.7
BFS-1C-W	5	100	50.0	0.4	2.5
	12	550	21.8	1.0	6.7

### 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 50mV,10mA	100mΩ	150mΩ
Max.Dynamic Contact Resistance 0.5V,50mA at 100Hz,1.5msec	200mΩ	200mΩ



## Electrical Specifications

Contact Form		1 Form A	1 Form C
Breakdown Voltage	Between contacts	250VDC	200VDC
	Contacts to shield	250VDC	N/A
	Contacts / shield to coil	1500VDC	1500VDC
Insulation Resistance(at 100V, 25°C, 40%RH)		$10^{12}\Omega$	$10^{11}\Omega$
Capacitance-Typical	Shield Floating	0.9pF	0.9pF
	Across Open Contacts	0.2pF	N/A
Operate Time Including bounce - Typical		0.5mS	1.0mS
Release Time		0.1mS	2.0mS

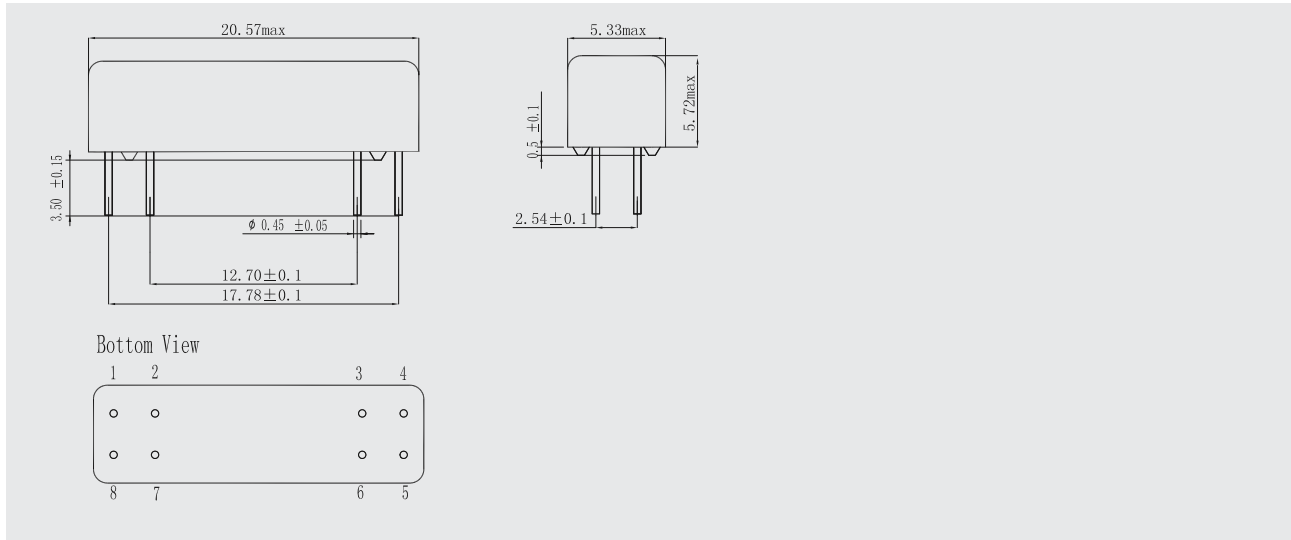
## Mechanical Specifications

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

## Environmental

Operating Temp	-40°C~+125°C	
Storage Temp	-40°C~+125°C	
Life Expectancy (1.0VDC 10mA)	$5 \times 10^8$	$1 \times 10^8$
Rated Loads	$5 \times 10^6$	$5 \times 10^6$

## Dimensions (Unit : mm)



## Wiring Diagrams (Top View)

