

BU Series (1a)

Surface Mount Reed Relays

Features

- Available in Dull wing and J lead configurations.
- Tape and Reel packaging available.
- High reliability, hermetically sealed contacts for long life.
- High insulation resistance, 10^{12} minimum.
- Coaxial shield for 50 impedance. Excellent for RF and fast.
- Rise time pulse switching (up to 6 Ghz).
- External magnetic shield.



Order Code

BU-1A XX X
a b

a : Nominal Coil Voltage : 03=3.3VDC, 05=5VDC

b : Nil=Gull Wing Type, J=J-Lead Type

Coil Data-Standard Type 1 Form A (at 20°C)

Nominal Voltage DC $\pm 10\%$ [V]	Max. Coil Voltage (VDC)	Coil Resistance $\pm 10\%$ (ohm)	Min. Release Voltage (VDC)	Max. Operate Voltage (VDC)
3.3	4	70	0.4	2.5
5	6	150	0.4	3.8

Contact Rating

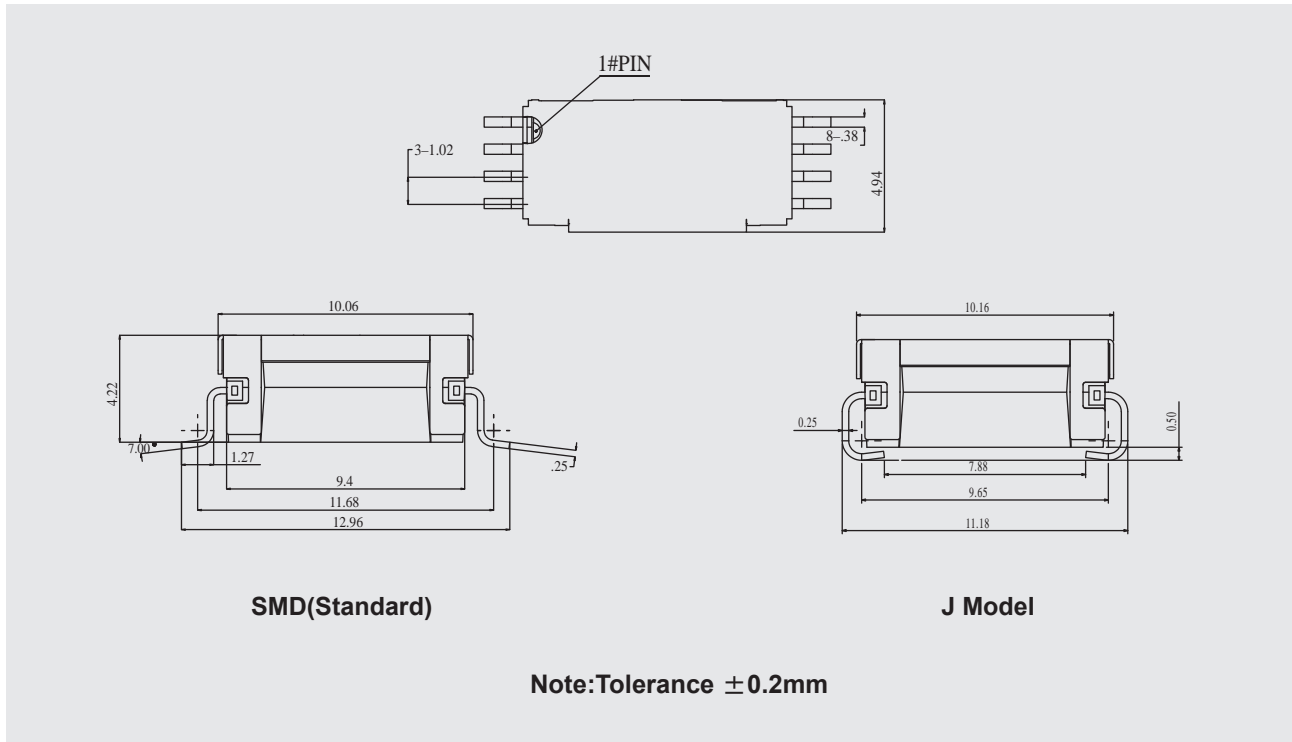
Contact Form	1 Form A
Contact Rating	10W
Switching Voltage	170VDC / 120VAC.RMS
Max. Switching Current	0.5A
Max. Carry Current	1.0A



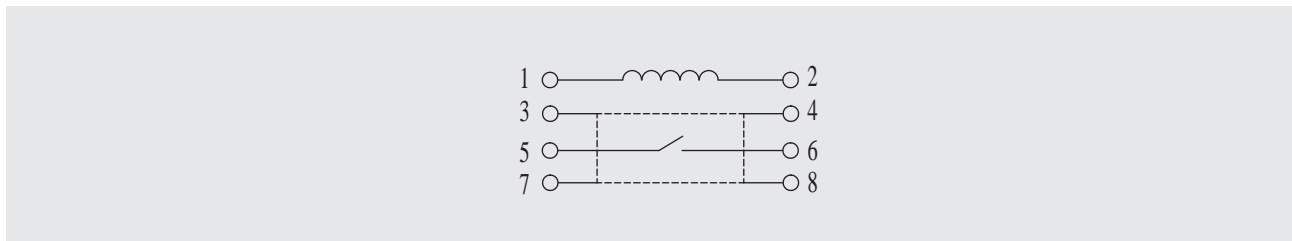
Specification

Contact Resistance	150mΩ	
Max. Dynamic Contact Resistance	150mΩ	
Breakdown Voltage	Between contacts	210VDC / peak AC
	Contacts to shield	1500VDC / peak AC
	Contacts / shield to coil	1500VDC / peak AC
Insulation Resistance	Open contacts 1x10 ¹² Ω	
Capacitance-Typical	Open contacts : 0.2pF	
Operate Time	0.25mS	
Release Time	0.05mS	
Vibration	20G 10~2000Hz	
shock	50G	
Operating Temperature	-35°C ~+100°C	
Storage Temperature	-20°C ~+85°C	
Life Expectancy of Mechanical	1X10 ⁹ Operations	
Life Expectancy of Electrical	Signal Level 1.0V, 10mAx10 ⁹ Ops	

Dimensions (Unit : mm)



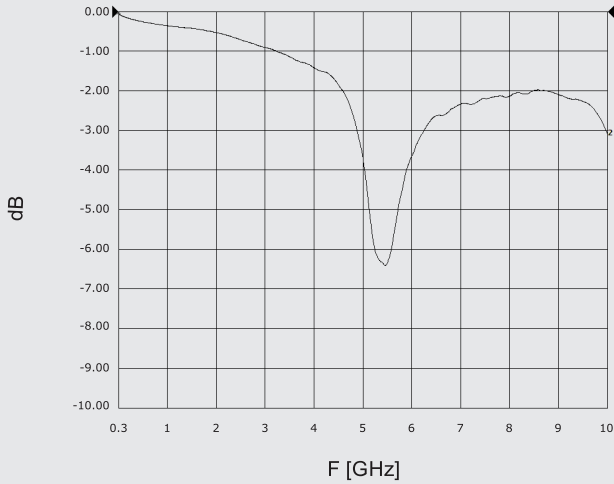
Wiring Diagrams (Top View)



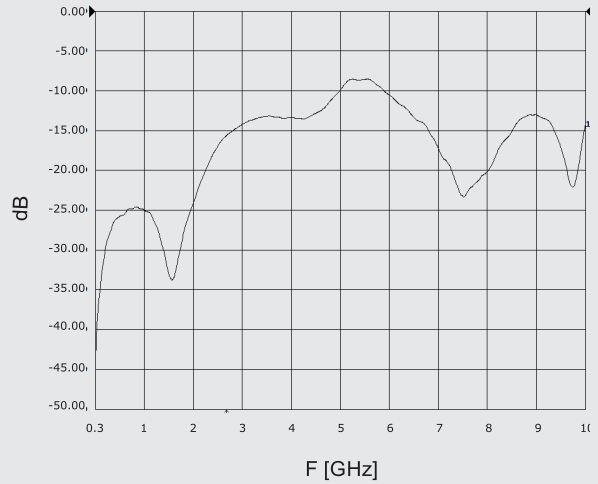


S-Parameters (BU 105)

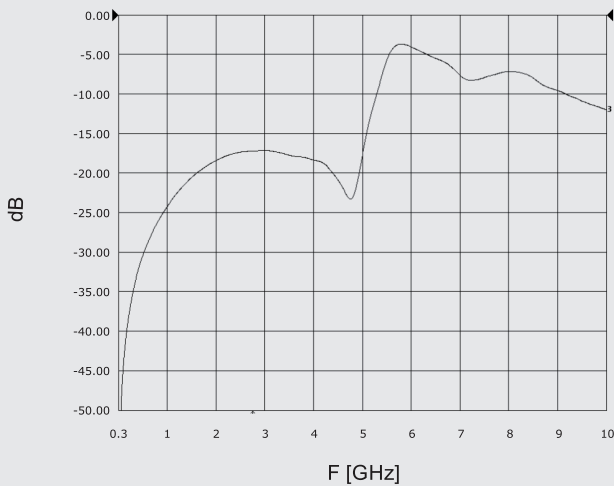
Insertion Loss



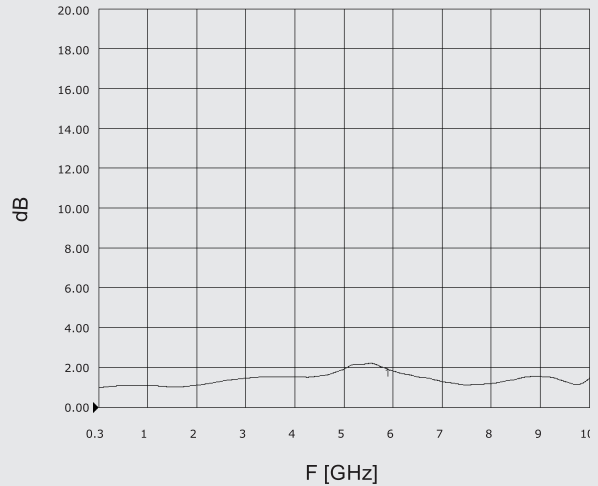
Return Loss



Isolation

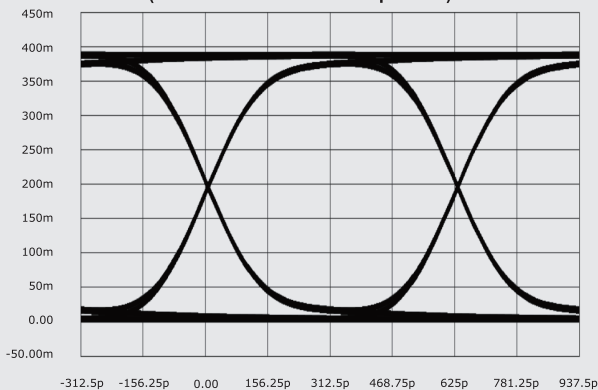


V.S.W.R.

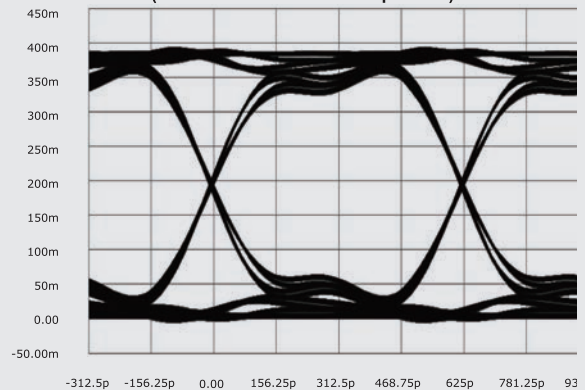


Eye Diagram (BU 105)

Rise Time \approx 250ps , Bit Rate: 1.6Gb/s
PRBS (Pseudo Random Bit Sequence): $2^{15}-1$ bits

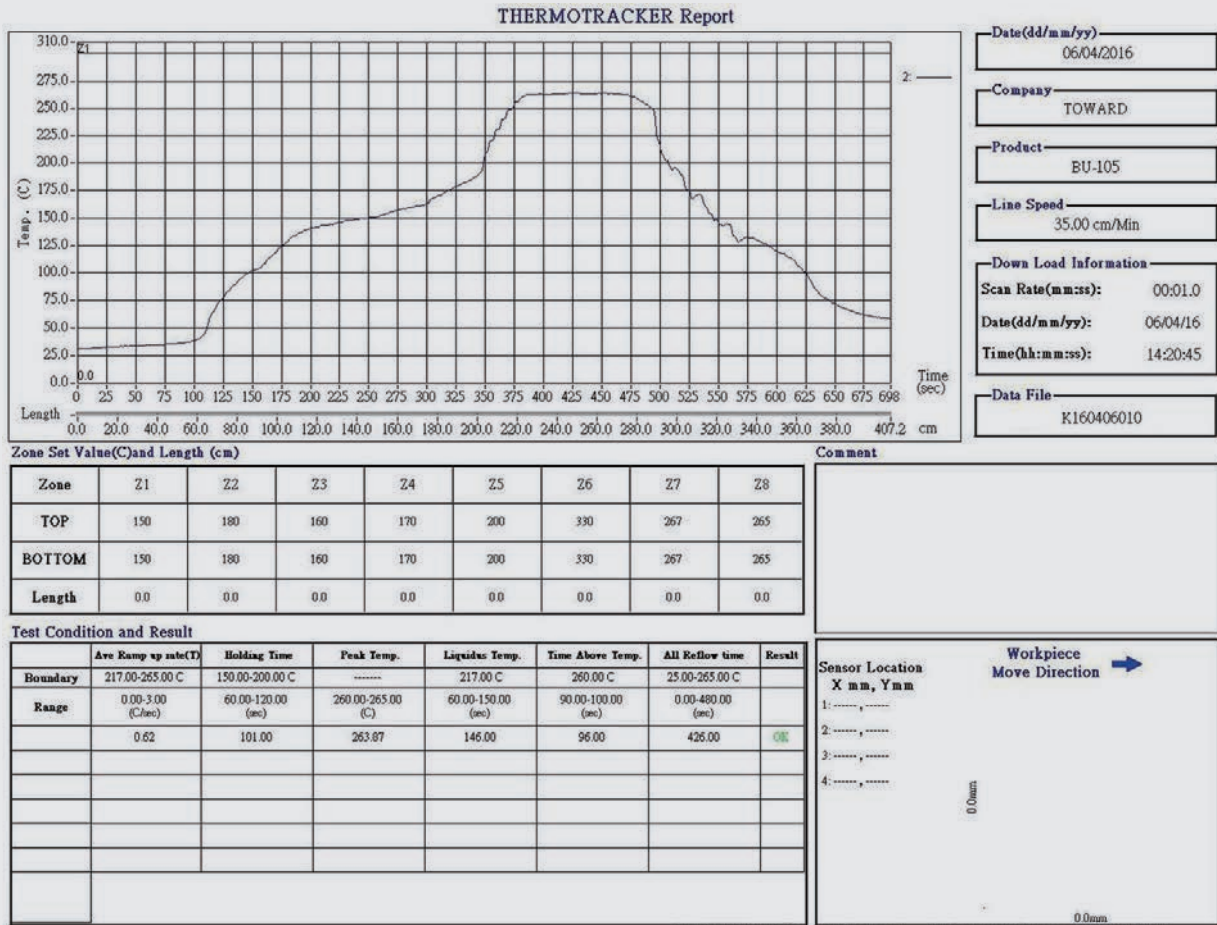


Rise Time \approx 30ps , Bit Rate: 6.4Gb/s
PRBS (Pseudo Random Bit Sequence): $2^{15}-1$ bits





Reflow Soldering Temperature can withstand 260°C / 90 sec as below profile.



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