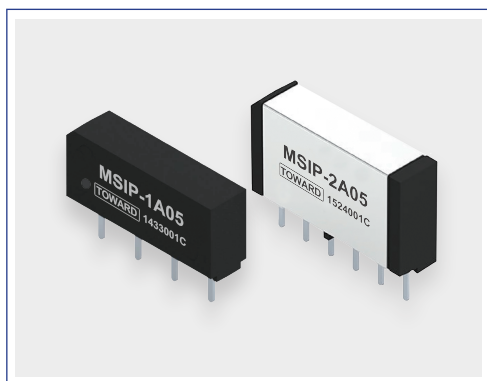




MSIP SERIES

MINI SIZE 1A 2A REED RELAY



KEY FEATURES

- Magnetic shield-reduces interaction
- Optional coil suppression diode protects coil drive circuits
- High insulation resistance
- High speed switching
- High board density and long life
- Molded thermoset body on integral lead frame design
- High reliability, hermetically sealed contacts for long life

ORDER CODE

MSIP - XX XX X - X

(a) (b) (c) (d)

- Ⓐ Contact Form: 1A = 1 Form A, 2A = 2 Form A
- Ⓑ Nominal Coil Voltage: 05 = 5VDC, 12 = 12VDC
- Ⓒ Nil = Standard type, D = Diode, S = Magnetic shield, N = Diode + Magnetic shield
- Ⓓ Special Code: Nil = Standard, A-Z = Special

COIL DATA-STANDARD TYPE (at 20°C)

PART NUMBER	NOMINAL VOLTAGE DC $\pm 10\%$ [V]	COIL RESISTANCE $\pm 10\%$ [Ω]	NOMINAL CURRENT [mA]	MUST RELEASE VOLTAGE MIN.[V] at 20°C	MUST OPERATE VOLTAGE MAX.[V] at 20°C
MSIP-1A	5	500	10	0.4	4.0
	12	1000	12	1.0	9.0
MSIP-2A	5	375	13	0.4	4.0
	12	750	16	1.0	9.0

CONTACT SPECIFICATIONS (at 20°C)

ITEM	PERFORMANCE CHARACTERISTICS	
Contact Form	1 Form A	2 Form A
Contact Rating	10W	10W
Max. Switching Voltage	200V	200V
Max. Switching Current	0.5A	0.5A
Max. Carry Current	1.5A	1.2A
Max. Static Contact Resistance	125m Ω	140m Ω
Max. Dynamic Contact Resistance	150m Ω	200m Ω

ELECTRICAL SPECIFICATIONS

ITEM	PERFORMANCE CHARACTERISTICS	
Contact Form	1 Form A	2 Form A
Breakdown Voltage:	200VDC	200VDC
	Between contacts	200VDC
	1500VDC	1500VDC
	Contact to coil	Contact to coil
Insulation Resistance	$10^{12}\Omega$	$10^{12}\Omega$
Capacitance - Typical across open contacts	0.1pF	1.0pF
Open Contact to Coil	2.0pF	1.4pF
Operate Time Including Bounce - Typical	0.5mS	0.75mS
Release Time	0.3mS	0.5mS

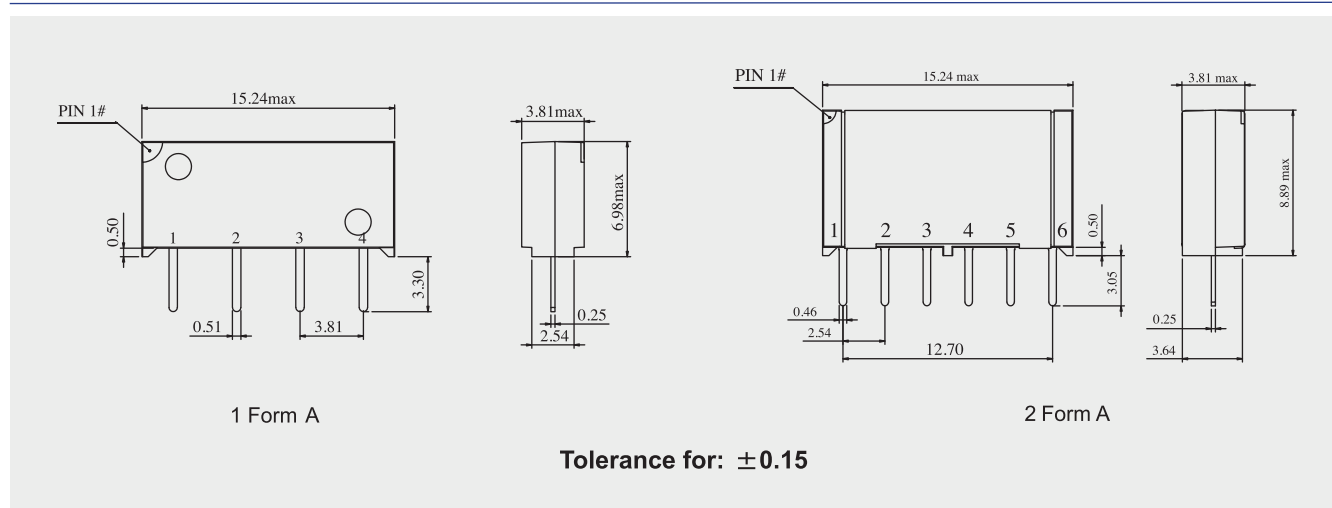
MECHANICAL SPECIFICATIONS

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

ENVIRONMENTAL

Operating Temp.	-20°C~+85°C
Storage Temp.	-35°C~+100°C
Life Expectancy (1.0VDC 10mA)	5X10 ⁸
Wave Solder Temp.	260°C / 10sec

DIMENSIONS (Unit: mm)



WIRING DIAGRAMS (Bottom View)

