

DESCRIPTION

Coto Technology's epoxy molded DIP 14 Series offers a variety of contacts and schematics to meet the needs of a wide range of applications. It features the MVS7 models designed for high reliability. The MSS7 DIPs are 1 form A relays equipped with the MYAD all-position mounting switch. With switching up to 50 Watts and a 4000V isolation option, the DIP 14 Series is a relay package that allows for automatic insertion directly on PCBs as well as insertion into standard 14 pin DIP sockets.

FEATURES

- All position mercury contacts on some models
- Stable contact resistance over life
- 4000 Vac input-output isolation
- Bounce free operation
- High insulation resistance
- Switching speed of 300Hz
- Long life > 1 billion operations
- Epoxy molded for automatic board processing

APPLICATIONS

- ATE
- Process control
- Industrial
- Telecom
- Datacom
- High-end security systems
- Signaling
- Metering

SPECIFICATIONS

MSS7

Molded 4-pin
All position
Wetted Contacts

MVS7

High Dielectric
Strength DIP
Wetted Contacts

All parameters are at 25°C unless otherwise stated.

Parameters	Conditions	Min	Typ	Max	Min	Typ	Max	Units
Contact Ratings								
Switching Voltage	Max DC/PeakAC Resistive			500			1000 ¹	Volts
Switching Current	Max DC/PeakAC Resistive			2			2	Amps
Carry Current	Max DC/PeakAC Resistive			3			3	Amps
Contact Rating	Max DC/PeakAC Resistive			50			50	Watts
Life Expectancy	Signal Level 1V, 10mA 50V, 1A		200		1000			x106
	500V, 100mA					2		x106
	50mV, 10mA					5		x106
Static Contact Resistance			40	100			100	mOhms
Contact Material			Hg			Hg		
Hg Content			16			40		mgrams
Relay Specifications								
Insulation Resistance	Between all isolated pins at 100V, 25°C, 40% RH	10 ⁸	10 ¹⁰		10 ¹⁰	10 ¹²		Ohms
Capacitance	Across Open Contacts		1.2	2		0.7		pF
	Upper Contact to Coil					1.5		pF
	Closed Contact to Coil					2.5		pF
	Open Contact to Coil		3	4				pF
Dielectric Strength	Between Contacts	2000						VDC/PeakAC
	Open Contacts				2000			VDC/PeakAC
	Contacts to Coil	5600			5600			VDC/PeakAC
Operate Time	At Nominal Coil Voltage		1.2	1.75		1.5	2.5	ms
(including bounce, DSS7only)	10Hz Square Wave							
Release Time	Zener-Diode Suppression		1	1.5		1	2.5	ms
Environmental Ratings								
Storage Temperature		-40		+105	-40		+105	°C
Operating Temperature		-38		+75	-38		+85	°C
Soldering Temperature	Applied to pins, 5sec. max		+260				+260	°C
Vibration Resistance ² (survival)	10Hz - 500Hz			10			10	Gs
Shock Resistance (survival)	11+/- 1ms, 1/2 Sine Wave			30			30	Gs
Weight			2.3			2.1		grams

¹ Current limited up to 5mA, minimum 20 million operations; for further information consult factory

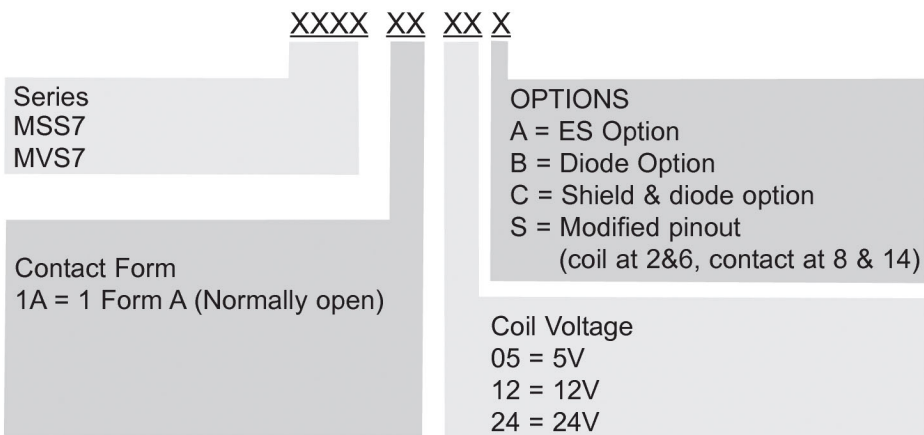
² Use caution not to exceed vibration resistance limits while ultrasonically cleaning relays with DYAD switches.

COIL SPECIFICATIONS

	Contact Form	Coil Voltage			Coil Resistance			Operate Voltage			Nominal Input Power					
Units		Volts			Ohms			Volts			Volts			mW		
Conditions					+/- 10% (25°C)			Must operate by (25°C)			Must release by (25°C)					
Part #		Min	Typ	Max	Min	Typ	Max	Min	Typ	Max	Min	Typ	Max	Min	Typ	Max
MSS71A05	1 Form A		5	11	126	140	154	0.5		3.75	0.5		3.75		179	
MSS71A12	1 Form A		12	21	450	500	550	1		9	1		9		288	
MSS71A24	1 Form A		24	43	1935	2150	2365	2		18	2		18		268	
MVS71A05(S)	1 Form A		5	7	94.5	105	116	0.5		3.75	0.5		3.75		238	
MVS71A12(S)	1 Form A		12	15	450	500	550	1		9	1		9		288	
MVS71A24(S)	1 Form A		24	30	1935	2150	2365	2		18	2		18		268	

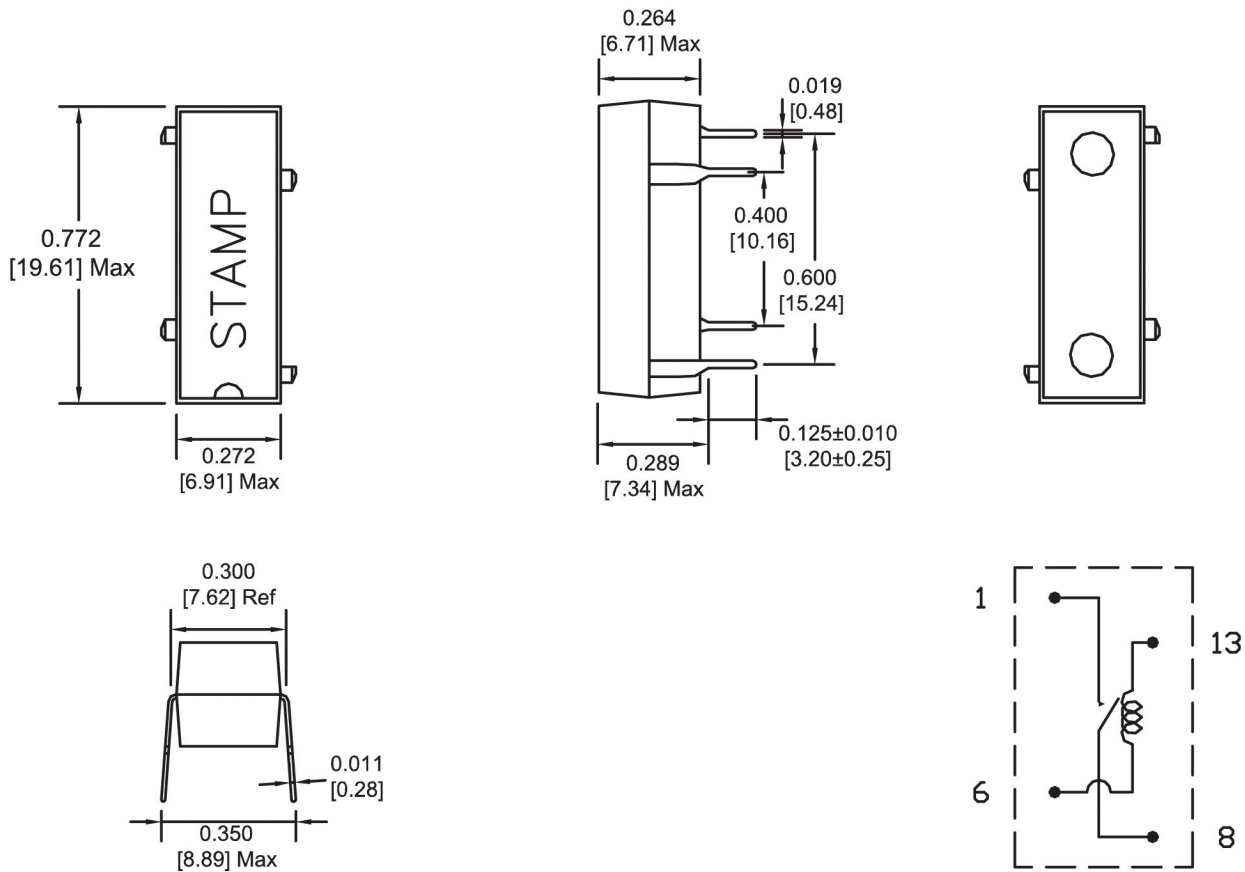
ORDERING INFORMATION

A complete part number is represented by the digits below



MECHANICAL DIMENSIONS

Dimensions in inches [mm]



WIRING DIAGRAM

MVS7 must be mounted vertically. Pin #1 is up.