

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

Parameters	Conditions	DSS7			MSS7			MVS7			Units
		Min	Typ	Max	Min	Typ	Max	Min	Typ	Max	
All parameters are at 25°C unless otherwise stated.											
<div style="display: flex; justify-content: space-around; font-size: small;"> Molded 4-pin Dry Reed Molded 4-pin All position Wetted Contacts High Dielectric Strength DIP Wetted Contacts </div>											
Contact Ratings											
Switching Voltage	Max DC/PeakAC Resistive			200			500			1000 ¹	Volts
Switching Current	Max DC/PeakAC Resistive			0.5			2			2	Amps
Carry Current	Max DC/PeakAC Resistive			2			3			3	Amps
Contact Rating	Max DC/PeakAC Resistive			10			50			50	Watts
Life Expectancy	Singnal Level 1V, 10mA 50V, 1A	300	500		200			1000			x106
Static Contact Resistance	500V, 100mA								2		x106
Contact Material	50mV, 10mA			150	40	100			5		x106
Hg Content			Ru		Hg				Hg		mgrams
					16				40		
Relay Specifications											
Insulation Resistance	Between all isolated pins at 100V, 25°C, 40% RH	10 ¹⁰	10 ¹²		10 ⁸	10 ¹⁰		10 ¹⁰	10 ¹²		Ohms
Capacitance	Across Open Contacts		0.7	1		1.2	2		0.7		pF
	Upper Contact to Coil								1.5		pF
	Closed Contact to Coil								2.5		pF
Dielectric Strength	Open Contact to Coil		1.5	2		3	4				pF
	Between Contacts	250			2000						VDC/PeakAC
	Open Contacts							2000			VDC/PeakAC
Operate Time (including bounce, DSS7only)	Contacts to Coil	5600			5600			5600			VDC/PeakAC
	At Nominal Coil Voltage		0.25	0.5		1.2	1.75		1.5	2.5	ms
Release Time	10Hz Square Wave Zener-Diode Suppression		0.25	0.5		1	1.5		1	2.5	ms
Enviromental Ratings											
Storage Temperature		-40		+105	-40		+105	-40		+105	°C
Operating Temperature		-38		+80	-38		+75	-38		+85	°C
Soldering Temperature	Applied to pins, 5sec. max			+260		+260				+260	°C
Vibration Resistance ² (survival)	10Hz - 500Hz			20			10			10	Gs
Shock Resistance (survival)	11+/- 1ms, 1/2 Sine Wave			100			30			30	Gs
Weight			1.5			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			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
DSS71A05	1 Form A		5	21	450	500	550	0.8		3.75	0.8		3.75			50
DSS71A12	1 Form A		12	30	900	1000	1100	1		9	1		9			144
DSS71A24	1 Form A		24	44	1935	2150	2365	2		18	2		18			268
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

XXXX XX XX X

Series
DSS7
MSS7
MVS7

Contact Form
1A = 1 Form A (Normally open)

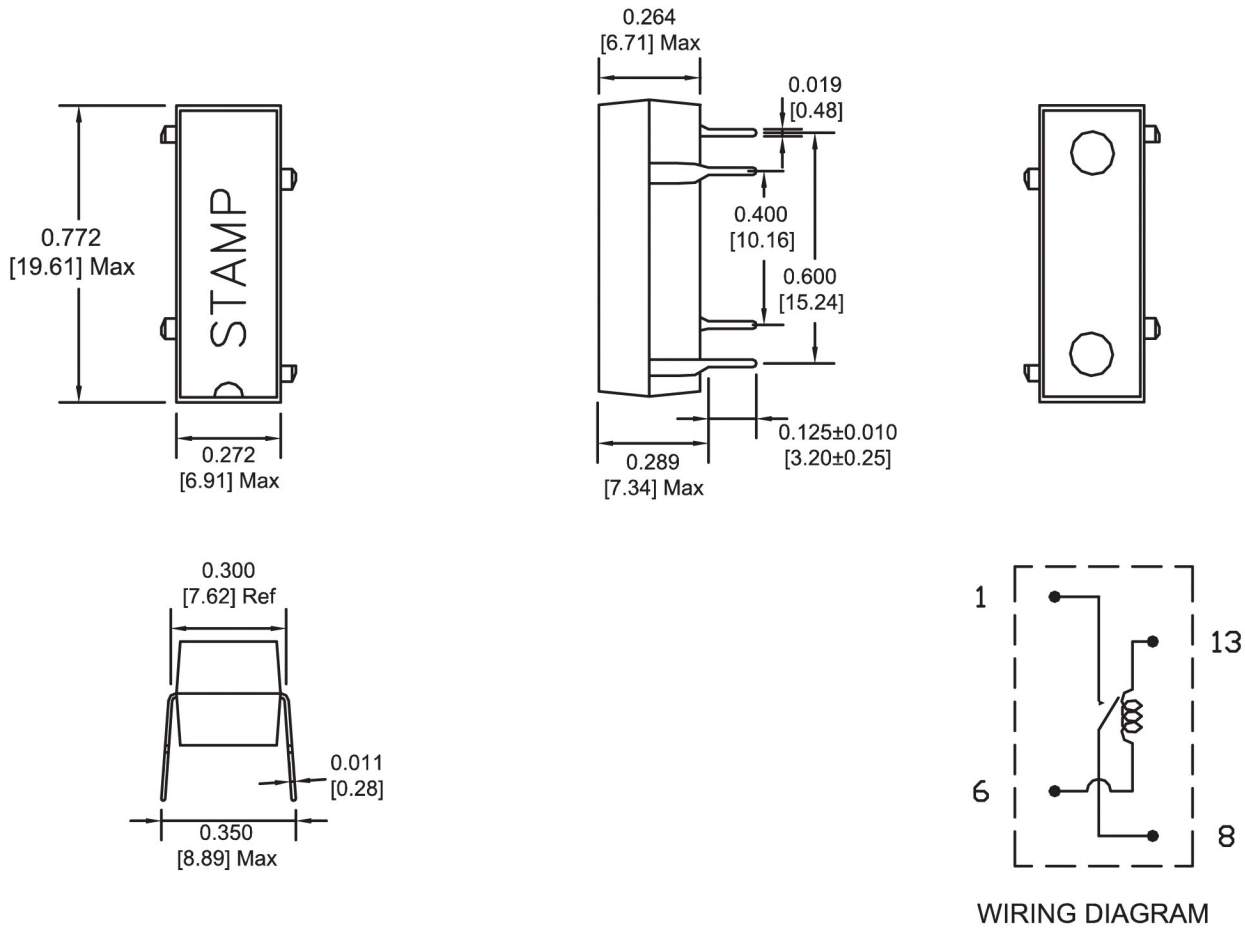
OPTIONS

A = ES Option
B = Diode Option
C = Shield & diode option
S = Modified pinout
(coil at 2&6, contact at 8 & 14)

Coil Voltage
05 = 5V
12 = 12V
24 = 24V

MECHANICAL DIMENSIONS

Dimensions in inches [mm]



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