

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

All parameters are at 25°C unless otherwise stated.

DSS7
Molded 4-pin
Dry Reed

MSS7
Molded 4-pin
All position
Wetted Contacts

MVS7
High Dielectric
Strength DIP
Wetted Contacts

Parameters	Conditions	Min	Typ	Max	Min	Typ	Max	Min	Typ	Max	Units
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 500V, 100mA 50mV, 10mA	300	500			200		1000			x106 x106 x106 mOhms
Static Contact Resistance				150		40	100		2		
Contact Material			Ru			Hg			5		
Hg Content						16			Hg 40		mgrams
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 Upper Contact to Coil Closed Contact to Coil Open Contact to Coil		0.7	1		1.2	2		0.7 1.5 2.5		pF pF pF pF
Dielectric Strength	Between Contacts Open Contacts Contacts to Coil	250 5600	1.5	2	2000 5600	3	4	2000 5600			VDC/PeakAC VDC/PeakAC VDC/PeakAC
Operate Time (including bounce, DSS7only)	At Nominal Coil Voltage 10Hz Square Wave		0.25	0.5		1.2	1.75		1.5	2.5	ms
Release Time	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

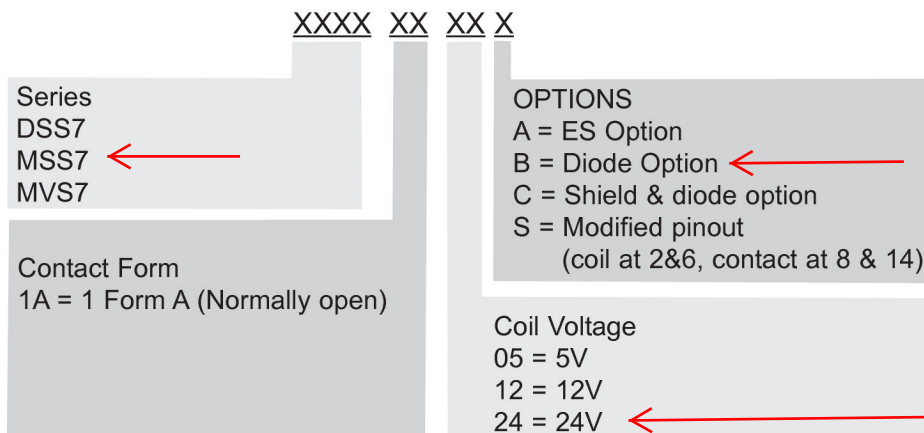
² Use caution not to exceed vibration resistance limits while ultrasonically cleaning relays with DYAD switches.

COIL SPECIFICATIONS

	Contact Form	Coil Voltage			Coil Resistance			Operate Voltage			Nominal Input Power					
Units		Volts			Ohms			Volts			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	

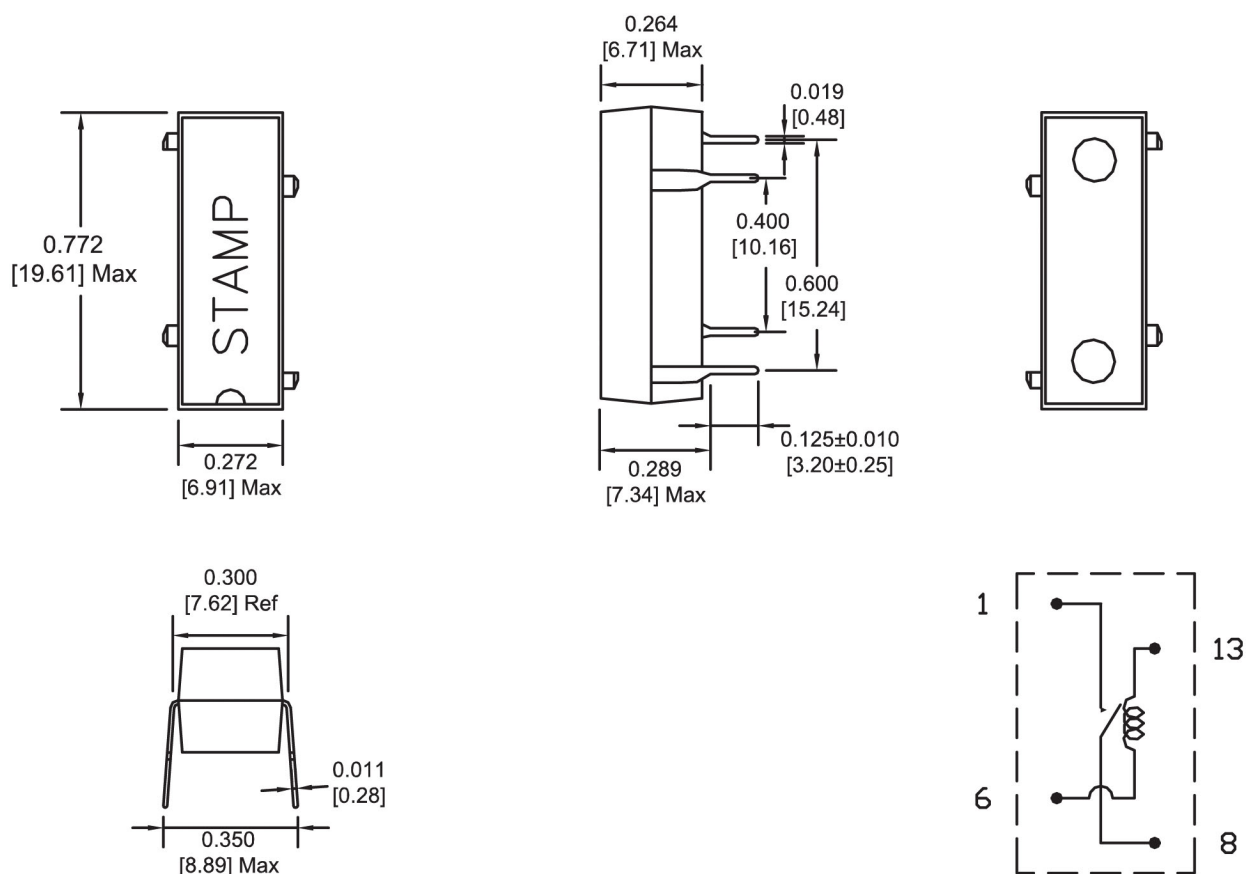
ORDERING INFORMATION

A complete part number is represented by the digits below



MECHANICAL DIMENSIONS

Dimensions in inches [mm]



WIRING DIAGRAM

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

Mouser Electronics

Authorized Distributor

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