

HGZM

Miniature Mercury Wetted Reed Relay

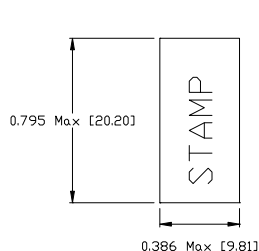
FEATURES

- Stable contact resistance for the life of the relay
- Up to 50W/ 500V switching
- Switching life of up to 1,000,000 cycles
- High pin to pin isolation
- Small size allows greater on-board density

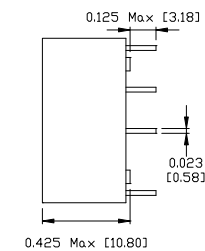
DESCRIPTION

SRC Devices' HGZM relay uses a standard 16-pin DIP package. All relays are completely sealed and made of plastic material that conforms to UL94 flammability standard. All types offer more than a billion operations, during which the contact resistance remains stable (± 5 mOhms), regardless of load or temperature.

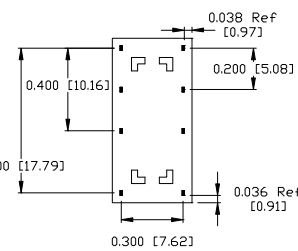
MECHANICAL DIMENSIONS



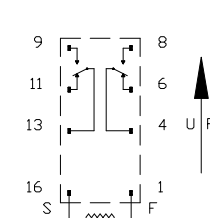
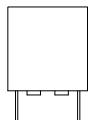
TOP VIEW



SIDE VIEW



BOTTOM VIEW


WIRING DIAGRAM
TOP VIEW


FRONT VIEW

Mechanical dimensions

All dimensions are measured in inches (millimeters)

WORKING VALUES

Part #	Contact Form	Nominal Coil Voltage	Max. Coil Voltage	Coil Resistance	Max. Operate Voltage	Min. Release Voltage	Nominal Input Power
Units		Volts	Volts	Ohms	Volts	Volts	mW
Conditions				+/- 10%, 25° C	Must operate by 25° C	Must release by 25° C	
HGZM1C05	1 Form C	5	7	44	3.75	0.5	568
HGZM1C12	1 Form C	12	17	280	9	1	514
HGZM1C24	1 Form C	24	33	1050	18	2	549
HGZM1C48	1 Form C	48	65	4100	36	4	562
HGZM2C05	2 Form C	5	7	44	3.75	0.5	568
HGZM2C12	2 Form C	12	17	280	9	1	514
HGZM2C24	2 Form C	24	33	1050	18	2	549
HGZM2C48	2 Form C	48	65	4100	36	4	562

All parameters are at 25° C unless otherwise stated.
Operate voltage, release voltage, and coil resistance
will change by 0.4%/°C as ambient temperature varies.

HGZM
1 or 2 Form C
Hg-wetted

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
Contact Ratings					
Switching Voltage	Max DC/Peak AC Resistive	-	-	500	Volts
Switching Current	Max DC/Peak AC Resistive	-	-	2	Amps
Carry Current	Max DC/Peak AC Resistive	-	-	3	Amps
Contact Rating	Max DC/Peak AC Resistive	-	-	50	Watts
Life Expectancy	Signal Level 1.0V 10mA	1000	2000	-	x10 ⁶ Ops
Static Contact Resistance	50mV, 10mA	-	-	150	mOhms
Dynamic Contact Resistance	0.5V, 50mA @ 100Hz, after 1.5ms	-	-	N/A	mOhms
Contact Material		-	Ru	-	
Relay Specifications					
Insulation Resistance	Between all Isolated Pins ⁽¹⁾	10 ⁸	-	-	Ω
Capacitance	Across Open Contacts	-	-	1.5	pF
	Open Contacts to Coil/Shield	-	-	4.3	pF
Dielectric Strength	Between Contacts	1400	-	-	VDC/Peak AC
	Contacts to Coil	1400	-	-	VDC/Peak AC
Operate Time (inc. bounce)	@ Nominal Coil Voltage, 10Hz sq. wave	-	2.5	5	ms
Release Time	Zener Diode Suppression	-	1.5	5	ms
Environmental Ratings					
Storage Temperature	-	-40	-	+105	°C
Operating Temperature	-	-20	-	+70	°C
Soldering Temperature ⁽¹⁾	-	-	-	+260	°C
Vibration Resistance	10Hz - 500Hz	-	-	10	G
Shock Resistance	11±1ms, ½ Sine Wave	-	-	30	G
Weight	-	-	5	-	grams

(1) Can Withstand up to a minute immersion in a surface mount soldering process.

ORDERING INFORMATION

