MR622 Series

The NEC MR622 offers such characteristics as, low power consumption, and high breakdown voltage in a compact through hole design like the MR602, however it has a higher breakdown voltage between coil and contacts (4000Vac).

This MR622 is available in a polarized 2 form C (DPDT) or 2 form D (DPDT-MB) contact arrangements in a through hole DIP terminal design.

FEATURES

- DIP terminal
- High breakdown voltage between coil and contact
- 2 form C and 2 form D Bifurcated-Crossbar Contacts
- Plastic sealed package for flow-soldering process
- Super reliability at signal level
- UL recognized (E73266), CSA certified (LR46266)

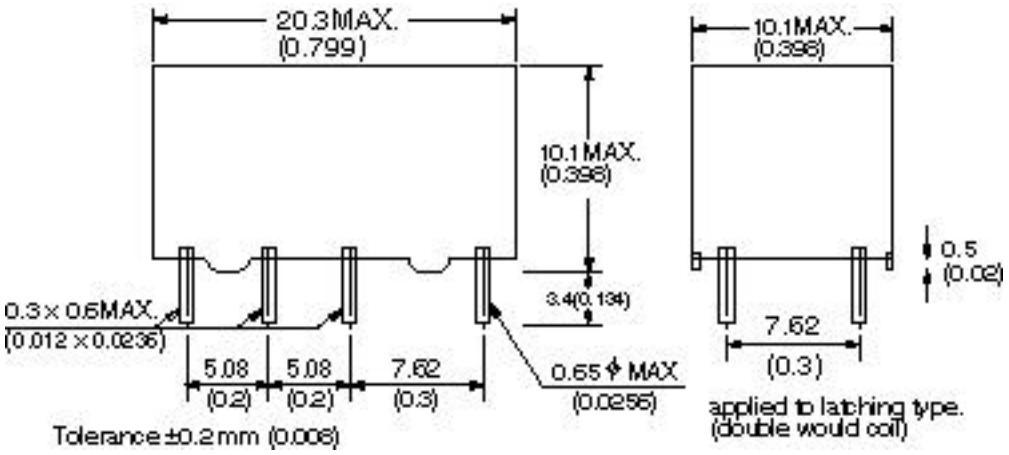
SPECIFICATIONS

Contact Form		2 form C or 2 form D
Contact Material		Silver alloy with gold alloy overlay
Contact Ratings	Maximum switching power	60 W, 125 VA
	Maximum switching voltage	220 Vdc, 250 Vac
	Maximum switching current	2 A
	Maximum carrying current	2 A
Minimum Contact Ratings		100 mVdc, 100 µA
Initial Contact Resistance		50 mOhm typical
Nominal Operating Power		Approximately 400 mW
Operate Time (Excluding bounce)		Approximately 2.5 ms without diode
Release Time (Excluding bounce)		Approximately 2 ms without diode
Insulation Resistance		1000 MOhm at 500 Vdc
Breakdown Voltage	Between open contacts	1000 Vac (for one minute): 2 form C contact 500 Vac (for one minute): 2 form D contact
	Between adjacent contacts	1000 Vac (for one minute)
	Between coil to contacts	4000 Vac (for one minute)
Shock Resistance		294 m/s^2 (30 G) (misoperating) 980 m/s^2 (100G) (destructive failure)
Vibration Resistance		10 to 55 Hz, double amplitude 1.5 mm (10 G) (misoperating) 10 to 55 Hz, double amplitude 5 mm (30 G) (destructive failure)
Ambient Temperature		-40 to +85°C
Coil Temperature Rise		40 degrees at nominal coil voltage
Running Specifications	Nonload	1 x 10^7 operations
	Load	50 Vdc, 0.1 A (resistive) 1 x 10^6 operations at 85°C
		10 Vdc, 10 mA (resistive)1 x 10^6 operations at 85°C
Weight		Approximately 3.5 g

* rise time: 10µs,
  fall time: 160µs

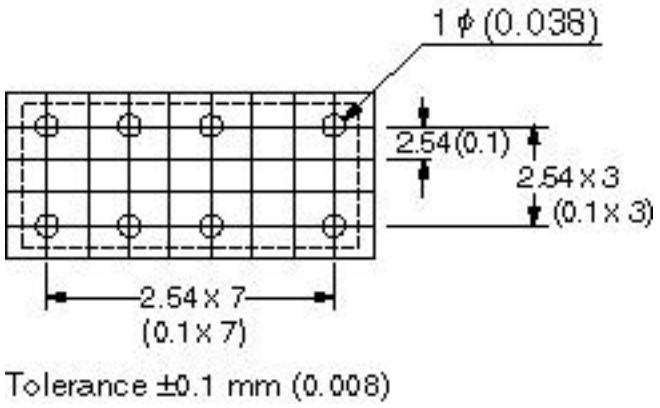
DIMENSIONS

mm (inch)



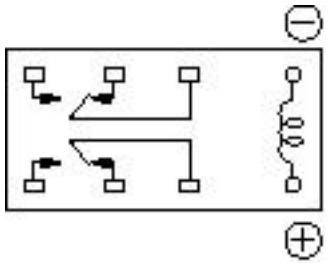
PCB PAD LAYOUT

(bottom view) mm (inch)



SCHEMATICS

(bottom view)



Not energized position

PART NUMBER SYSTEM

MR622	-	5	U	S	2	R
①		②	③	④	⑤	⑥

① Relay Series

② Nominal Coil Voltage (See part numbers)

③ Safety Standard
Blank: Standard Type
U: UL Recognized CSA Certified Type

④ Sealed Type (Washable)

⑤ Contact Arrangement
Blank: 2 Form C
2: form D

⑥ Contact Material
Blank: Silver-palladium alloy with gold alloy overlay
R: Silver-nickel alloy with gold alloy overlay

PART NUMBERS

Standard Type at 25° C (77° F)

2 form C	2 form D	Nominal Coil Voltage (Vdc)	Coil Resistance (Ohm) ±10%	Must Operate Voltage (Vdc)		Must Release Voltage (Vdc)	
				2 form C	2 form D	2 form C	2 form D
MR622-1.5SR	MR622-1.5S2R	1.5	5.63	1.05	1.05	0.15	0.15
MR622-3SR	MR622-3S2R	3	22.5	2.1	2.1	0.3	0.3
MR622-4.5SR	MR622-4.5S2R	4.5	50.6	3.15	3.15	0.45	0.45
MR622-5SR	MR622-5S2R	5	62.5	3.5	3.5	0.5	0.5
MR622-6SR	MR622-6S2R	6	90	4.2	4.2	0.6	0.6
MR622-9SR	MR622-9S2R	9	203	6.3	6.3	0.9	0.9
MR622-12SR	MR622-12S2R	12	360	8.4	8.4	1.2	1.2
MR622-24SR	MR622-24S2R	24	1440	16.8	16.8	2.4	2.4

SAFETY STANDARD AND RATING

UL Recognized (UL508)* File No. E73266	CSA Certified (CSA C22.2 No. 14) File No. LR46266
30 Vdc, 2 A (Resistive) 110 Vdc, 0.6 A (Resistive) 125 Vac, 0.5 A (Resistive)	

* Spacing: UL114, UL478

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