

Ratings

4PDT (4 form C) contacts, 5 amp @
29VDC, 2 amp @ 115VAC

Description

Miniature 4PDT relay
5 amp contact rating
AC or DC coils
50g operational shock
Temperature range:
MH: -55°C to +85°C
MHB, MHJ: -65°C to +125°C
Vibration level:
MH, MHB: up to 1000Hz at 15g
MHJ: up to 2000Hz at 20g
Weight: 3 ounces maximum
Enclosure: Hermetically sealed
Terminals: Plug-in, printed circuit, or hook-
type solder terminals

Performance Data:

Operate Time: 10ms maximum

Release Time:

DC coil—5ms maximum

AC coil—25ms maximum

Initial Contact Resistance: 0.05 ohms max.

Insulation Resistance: 1000 megohms min.

Contact Rating:

Non-inductive:

Low level up to 5 amp @ 29VDC

Low level up to 2 amp @ 115VAC, 60

to 400Hz (10, case not grounded)

0.3 amp @ 115VAC, 60 to 400Hz

(10, case grounded)

Inductive:

1 amp @ 29VDC

1 amp @ 115VAC, 60 to 400Hz

(10, case not grounded)

0.3 amp @ 115VAC, 60 to 400Hz

(10, case grounded)

Higher AC ratings available—
consult factory.

Dielectric strength

1000V rms at sea level

500V rms at 70,000 feet

350V rms at 80,000 feet

Vibration:

MH, MHB: 5-34Hz at 0.25 inch double

amplitude, 34-1000Hz at 15g

MHJ: 5-28Hz at 0.5 inch double

amplitude, 28-2000Hz at 20g

Shock: 50g operational—100g
mechanical

Ambient Temperature:

MH: -55°C to +85°C

MHB, MHJ: -65°C to +125°C

Approvals

MIL-R-5757, as applicable

Ordering Information

MH
I II III

I. Mounting and terminal variation

II. 12A or 12D (4PDT)

III. Coil voltage or mADC

Example: MHB-12D-6VDC calls for relay
with temperature range from -65°C to
+125°C, vibration level up to 1000Hz at
15g—standard mounting with hook pin
terminals—4PDT—6 volts DC.



Type Designation and Coil Data

Relay Type	DC Nominal Coil Data			Maximum Pick-up Voltage	
	Volts	Amperes	Ohms*	@ +25°C	@ +85°C
MH-12D-6VDC	6	.400	16	3.5	4.0
MH-12D-12VDC	12	.200	60	6.5	8.5
MH-12D-26.5VDC	26.5	.089	300	14.5	18.0
MH-12D-48VDC	48	.048	1000	28.0	33.0
MH-12D-115VDC	115	.023	5000	59.0	78.0
Temperature rise at rated voltage: 55°C above 25°C; 45°C above 85°C					
				@ +25°C	@ +125°C
MHB-(MHJ)-12D-6VDC	6	.461	13	3.2	4.0
MHB-(MHJ)-12D-12VDC	12	.240	50	6.2	8.5
MHB-(MHJ)-12D-26.5VDC	26.5	.106	250	13.0	18.0
MHB-(MHJ)-12D-48VDC	48	.060	800	26.0	33.0
MHB-(MHJ)-12D-115VDC	115	.023	5000	58.0	78.0
Temperature rises at rated voltage: 60°C above 25°C; 35°C above 125°C					

Current Adjusted Relays

Relay Type	Maximum Pick-up mA	Ohms*	Nominal Operate Current
MHB-(MHJ)-12D-12mADC	12.0	5,000	18.0mA
MHB-(MHJ)-12D-9mADC	9.0	10,000	13.5mA
MHB-(MHJ)-12D-7.5mADC	7.5	16,000	11.25mA

AC Coil Relay (60 to 400Hz with self-contained diodes)

Relay Type	Nominal Voltage	Coil Resistance Ohms*	Frequency Range
MHJ-12A-115VAC	115	2 coils** each 2765	45 to 420Hz

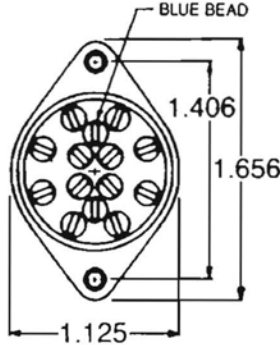
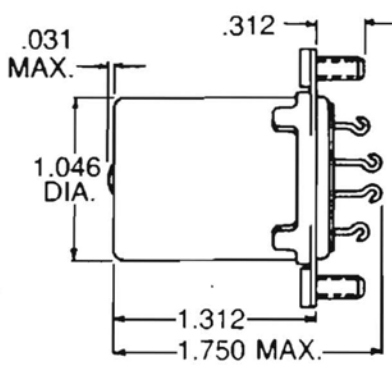
*DC coil resistance—standard tolerance = 10%.

Other values of resistance can be supplied.

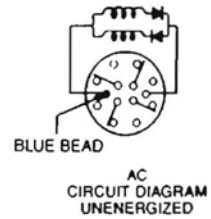
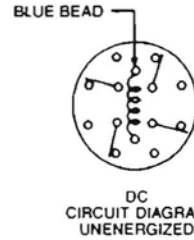
**Diodes used in AC relays rated at 600 P. I. V. minimum.

Diodes with higher ratings can be supplied. Consult factory.

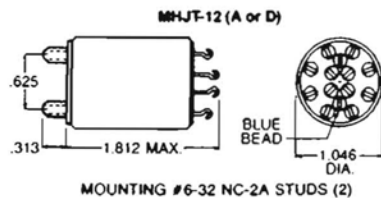
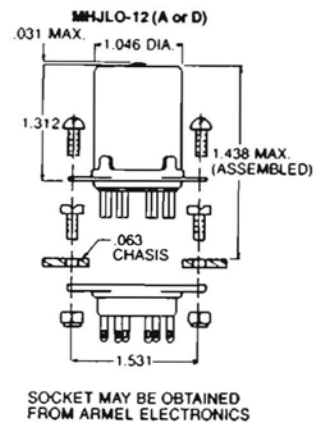
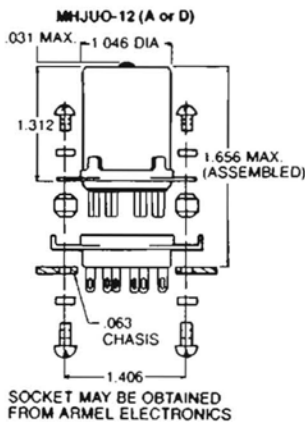
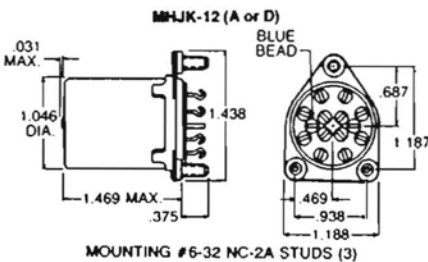
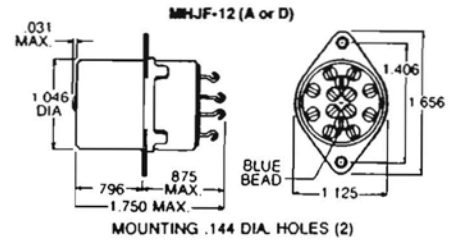
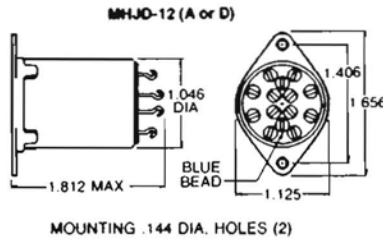
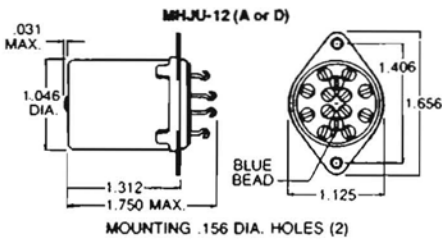
Dimensions & Schematics



MOUNTING #6-32 NC-2A STUDS (2)
Dimensional Tolerances $\pm .010$ "



Mounting Variations



Legend:

MH-12D, MHB-12D, MHJ-12A or D
 MHD-12D, MHBD-12D, MHJD-12A or D
 MHF-12D, MHBF-12D, MHJ-12A or D
 MHLO-12D, MHBLO-12D, MHJLO-12A or D
 MHUO-12D, MHBUO-12D, MHJUO-12A or D
 MHP-12D, MHBP-12D, MHJP-12A or D
 MHK-12D, MHBK-12D, MHJK-12A or D
 MHT-12D, MHBT-12D, MHJT-12A or D
 MHO-12D, MHBO-12D, MHJO-12A or D
 MHU-12D, MHBU-12D, MHJU-12A or D
 MHL-12D, MHBL-12D, MHJL-12A or D

Stud mounting with hook pins
 Top flange mounting with hook pins
 Center of gravity mounting, hook pin
 Socket mounting with straight pins for ARMEL HRSB series socket
 (1.531 mounting center)
 Socket mounting with straight pins for ARMEL HRSB series socket
 (1.406 mounting center)
 Printed circuit mounting, no flange with straight pins
 Tri-point flange stud mounting with hook pins
 Top stud mounting with hook pins
 Stud mounting with straight pins
 1.406 mntg center bracket with hook pins
 1.531 mntg center bracket with hook pins

Additional variations available upon request.