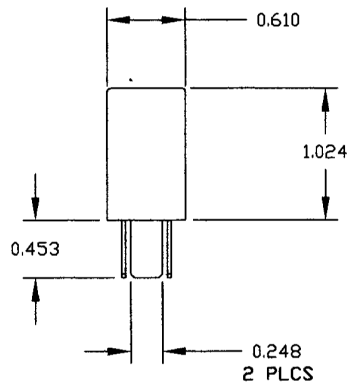
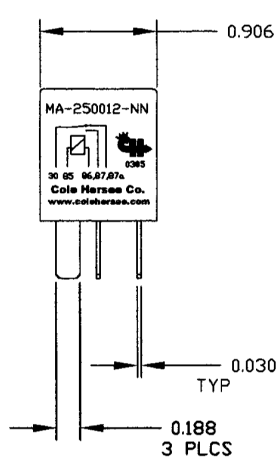
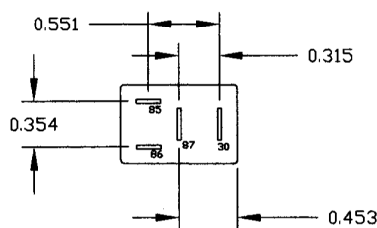
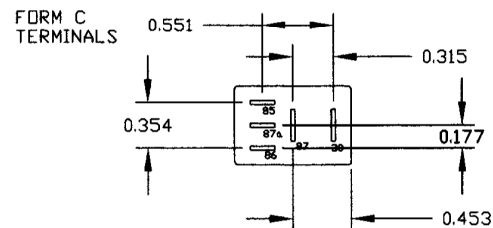




FORM A
TERMINALS



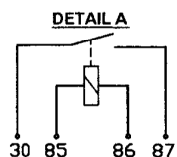
SPECIFICATIONS:

- PULL IN VOLTAGE 7.8V MAX [12VDC], 15.6V MAX [24VDC]
- RELEASE VOLTAGE 1.2V MIN [12VDC], 2.4V MIN [24VDC]
- MAX VOLTAGE 15.6VDC ON 12VDC, 31.2VDC ON 24V.
- OPERATING TEMPERATURE -40DEG C TO 85 DEG C
- VIBRATION RESISTANCE
10-40 HZ, DOUBLE AMPLITUDE 1.27 MM
- OPERATION LIFE:
100,000 ELECTRICAL
10,000,000 MECHANICAL
- CONTACT RATING: N.O. 25A @ 14VDC, N.C. 20A @ 14VDC,
N.O. 15A @ 24 VDC, N.C. 10A @ 24VDC RESISTIVE
- DIELECTRIC STRENGTH: 500V
- VCOIL RESISTANCE: FORM A 120 OHMS FOR 12VDC, FORM C 96 OHMS
FORM A 480 OHMS, FORM C 384 OHMS FOR 24VDC
- COIL SUPPRESSION 680 OHMS, 12 V AND 2702 OHMS 24 V
- ALL DIMS REF.

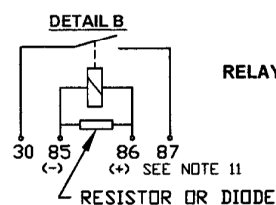
RELAY PART NUMBER STRUCTURE

M A- 25 00 12- R S

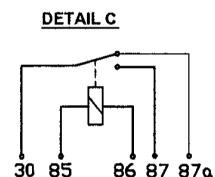
- S = SEALED
- N = NOTHING [NO SEALING]
- R = RESISTOR
- D = DIODE
- N = NOTHING [NO SUPPRESSION]
- 12 = 12VDC
- 24 = 24VDC
- 00 = NO BRACKET
- 25 = 25A [12VDC]
- 15 = 15A [24VDC]
- A = FORM A [SPST]
- C = FORM C [SPDT]
- M = MICRO-RELAY



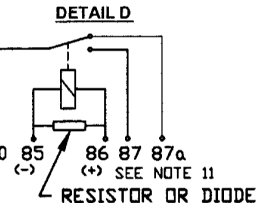
FORM A (SPST)



RELAY CIRCUITRY



FORM C (SPDT)



RESISTOR OR DIODE

TOLERANCES: Unless otherwise specifically noted, the following are default tolerances:
 * 2-place Decimal Dimensions $\pm .02^\circ$
 * 3-place Decimal Dimensions $\pm .015^\circ$
 * Angular Dimensions $\pm 1.0^\circ$
 * Metric: Refer to equivalent English Dimension Tolerance
 >>> NOTE: All tolerances are Non-Cumulative. <<<
Dimensional Units: All dimensions are expressed in inches except those shown in brackets (mm) are expressed in millimeters
REF. or an Asterisk CL: Non-Tolerance Reference Dimension, shown for clarification purposes only.

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DO NOT SCALE: Dimensional variation may occur during printing/ reproduction.

Special Characteristics:
 Critical Characteristic relating to Safety and/or Regulatory Compliance
 Significant Characteristic relating to Process Control (SPC)
 Control Dimension relating to Form - Fit - Function as defined by Cole Hersee Company and the Customer
 (Note that the Identification of any Characteristics as being "Special" does not alter the requirement that ALL specified dimensions & tolerances must be met.)

Cole Hersee Co.
 20 Old Colony Ave., South Boston, MA, 02127
 Phone 617-268-2100 Web: www.colehersee.com
Description: RELAY, MICRO TYPE
Drawing/ Part No.: MA-250012-NN
Scale: 1:1
Drawn By: JT
Date: 11-16-04
Responsible Engineer: JT
Page: Pg. 1 of 2

MC-150024-RN	DETAIL D	15A	FORM C	24 VDC	RESISTOR	NO
MC-150024-RS	DETAIL D	15A	FORM C	24 VDC	RESISTOR	SEALED
MC-150024-DS	DETAIL D	15A	FORM C	24 VDC	DIODE	SEALED
MC-150024-DN	DETAIL D	15A	FORM C	24 VDC	DIODE	NO
MC-150024-NS	DETAIL C	15A	FORM C	24 VDC	NONE	SEALED
MC-150024-NN	DETAIL C	15A	FORM C	24 VDC	NONE	NO
MA-150024-RN	DETAIL B	15A	FORM A	24 VDC	RESISTOR	NO
MA-150024-RS	DETAIL B	15A	FORM A	24 VDC	RESISTOR	SEALED
MA-150024-DS	DETAIL B	15A	FORM A	24 VDC	DIODE	SEALED
MA-150024-DN	DETAIL B	15A	FORM A	24 VDC	DIODE	NO
MA-150024-NS	DETAIL A	15A	FORM A	24 VDC	NONE	SEALED
MA-150024-NN	DETAIL A	15A	FORM A	24 VDC	NONE	NO
MC-250012-RN	DETAIL D	25A	FORM C	12 VDC	RESISTOR	NO
MC-250012-RS	DETAIL D	25A	FORM C	12 VDC	RESISTOR	SEALED
MC-250012-DS	DETAIL D	25A	FORM C	12 VDC	DIODE	SEALED
MC-250012-DN	DETAIL D	25A	FORM C	12 VDC	DIODE	NO
MC-250012-NS	DETAIL C	25A	FORM C	12 VDC	NONE	SEALED
MC-250012-NN	DETAIL C	25A	FORM C	12 VDC	NONE	NO
MA-250012-RN	DETAIL B	25A	FORM A	12 VDC	RESISTOR	NO
MA-250012-RS	DETAIL B	25A	FORM A	12 VDC	RESISTOR	SEALED
MA-250012-DS	DETAIL B	25A	FORM A	12 VDC	DIODE	SEALED
MA-250012-DN	DETAIL B	25A	FORM A	12 VDC	DIODE	NO
MA-250012-NS	DETAIL A	25A	FORM A	12 VDC	NONE	SEALED
MA-250012-NN	DETAIL A	25A	FORM A	12 VDC	NONE	NO
PART NUMBER	CIRCUITRY	RATING	TERMINAL LAYOUT	VOLTAGE	SUPPRESSION	SEALING

Tolerances: Unless otherwise specifically noted, the following are default tolerances:
 * 3-place Decimal Dimensions $\pm .02^\circ$
 * 3-place Decimal Dimensions $\pm .015^\circ$
 * Angular Dimensions $\pm 1.0 \text{ Deg}$
 * Metric: Refer to equivalent English Dimension Tolerance
 >>> NOTE: All tolerances are Non-Cumulative. <<<

Dimensional Units: All dimensions are expressed in inches except those shown in brackets (xxx) are expressed in millimeters.

DEF: as an Indirect D: Non-Toleranced Reference Dimension, shown for clarification purposes only.

Used On: MICRO RELAYS
 or Ref: Scale: 1:1

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Drawn By: JT
 Date Drawn: 11-16-04

Special Characteristics:

Critical Characteristic, relating to Safety and/or Regulatory Compliance

Significant Characteristic relating to Process Control (SPC)

Control Dimension relating to Form - Fit - Function as defined by Cole Hersee Company and/or the Customer

(Note that the identification of any Characteristics as being "Special" does not alter the requirement that ALL specified dimensions & tolerances must be met.)

Responsible Engineer: JT
 Pg. 2 of 2

Revision Control Record			
Rev.	Description of Change	ECN No.	Date
	SEE PAGE 1 FOR REVISION		

Cole Hersee Co. 20 Old Colony Ave., South Boston, MA, 02127 PHN 617-268-2100 Web: www.colehersee.com	
Description: RELAY, MICRO TYPE	
Drawing / Part No.: MA-250012-NN	SEE PAGE 1 FOR REVISION