

Features

- General purpose automotive relay
- Dimensions: 26.6mm × 26mm × 22.7mm
- 70A of switching capability
- Contact: 1 Form A
- Available for Plastic sealed and unsealed type
- Quick Connect Terminals and PCB Terminals
- 125°C of operating ambient temperature

**RoHS
Compliant**

Specification

Contact Data		
Contact Form		1 Form A
Contact Material		Ag Alloy
Contact Rating		Resistive: NO:70A/14V DC NO:40A/28V DC Inductive: Make150A/14V DC, break 50A/14V DC Lamp: Surge 200A/14V DC, break40A/14V DC
Contact Resistance		Max.50mΩ (24V DC 1A)
Load	Max. Switching Voltage	Refer to 'Max.switching power curve'
	Max. Switching Current	Make (NO,lamp) 200A, Break (steady state) 70A (res,13.5V)
	Max. Continuous Current	70A (23°C), 50A (85°C), 30A (125°C)
	Min. Switching Load	1A 6V DC
Life	Electrical	100,000 Cycles
	Mechanical	1,000,000 Cycles (300 cycles/minutes)
Coil Data		
Nominal Coil Power		1.6W(12V), 1.8W(24V)
Nominal Coil Power (With Resistor)		1.8W(12V), 2.0W(24V)
General Data		
Insulation Resistance		Min.100MΩ 500V DC
Dielectric Strength	Between open contacts	550V AC,50/60Hz,1 min
	Between coil and contacts	
Operate Time		Max. 10ms
Release Time		Max. 10ms
		Max.20ms (With Diode)
Operating Temperature		-40°C to +125°C
Humidity		5-95%RH, 50°C
Shock Resistanc		294m/s ²
Vibration Resistance		5Hz° 22.3Hz, 10mm Double Amplitude 22.3Hz° 500Hz, 98m/s ² (10g)
Weight		Approximately 32g (Without Bracket), Approximately 35g (Bracket)
Mechanic		Cover Strength: 200N (Pull/Press) Terminal Strength: 100N (Pull/Press) Terminal Bending: 10N (Each Direction)

Note:Data shown are of initial value

Newark.com/multicomp-pro
Farnell.com/multicomp-pro
sg.element14.com/b/multicomp-pro

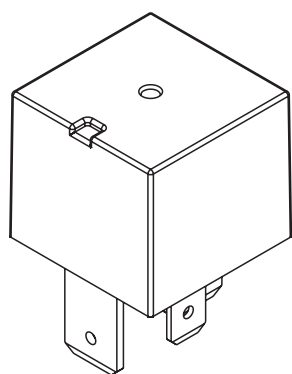
Coil Data

Ambient Temperature: 23°C

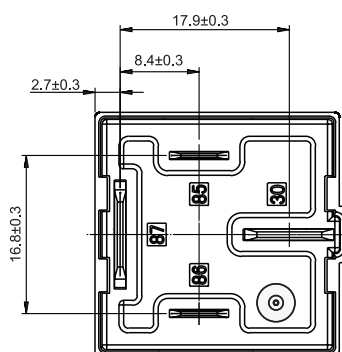
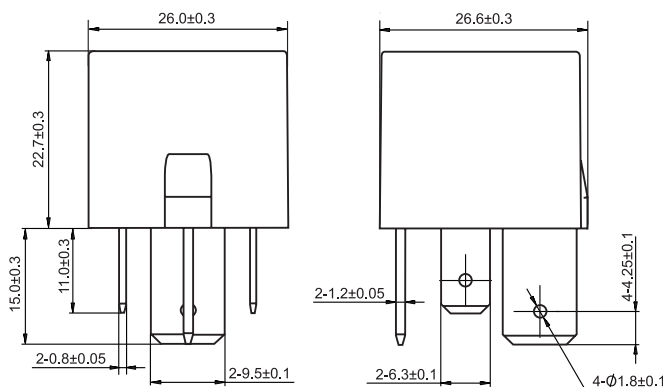
Model	Nominal Voltage V DC	Coil Resistance $\Omega \pm 10\%$	Parallel Resistance $\Omega \pm 5\%$	Equivalent Resistance $\Omega \pm 10\%$	Operate Voltage $\leq V_{DC}$	Release Voltage $\geq V_{DC}$	Coil Power W
MPCMA36N-DC12V-A-R	12	90	--	--	7.8	1.2	1.6
MPCMA36N-DC24V-A-R	24	320	--	--	16	2.4	1.8
MPCMA36N-S-DC12V-A-R	12	90	680	79.5	7.8	1.2	
MPCMA36N-S-DC24V-A-R	24	320	2700	286	16	2.4	2

Outline, Wiring Diagram, Mounting Hole Layout

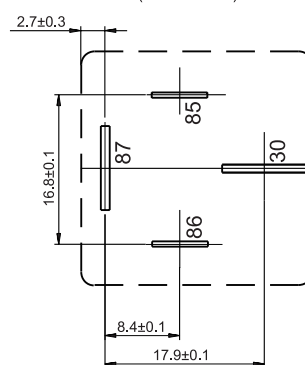
Quick Connect Terminals
Without Bracket



Outline



Mounting Hole Layout
(Bottom View)

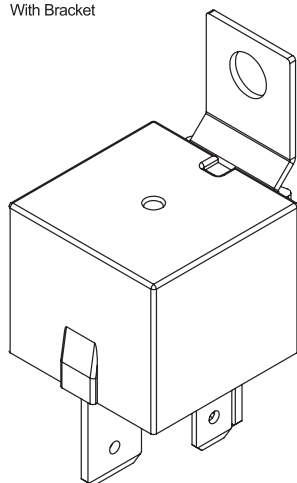


Dimensions : Millimetres

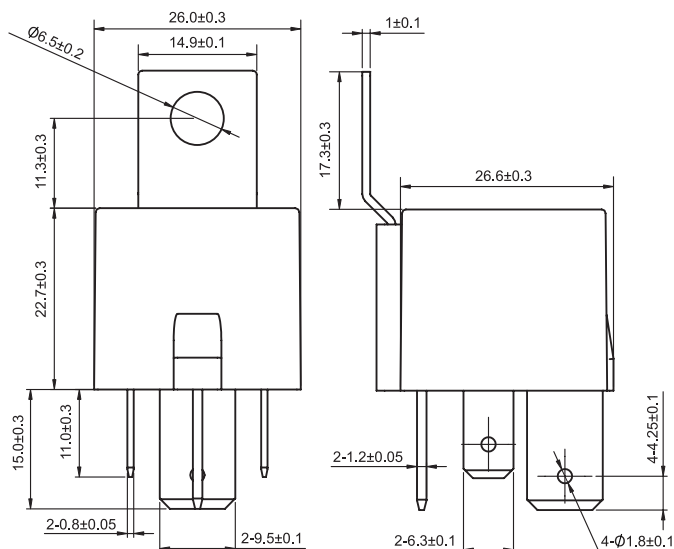
Automotive Relay

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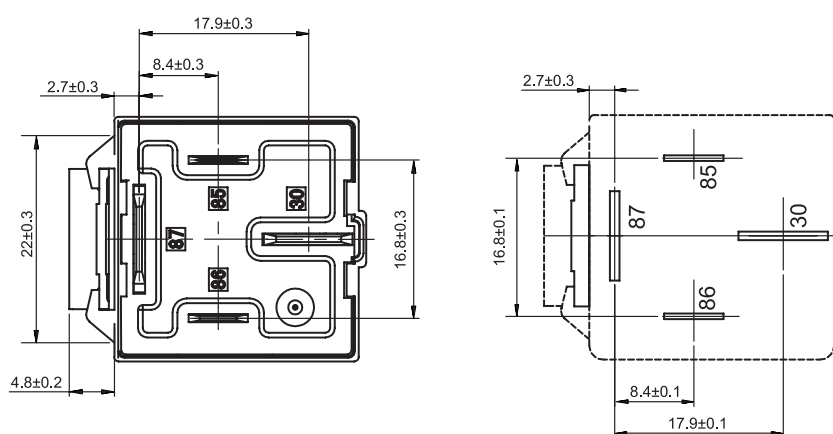
Quick Connect Terminals
With Bracket



Outline



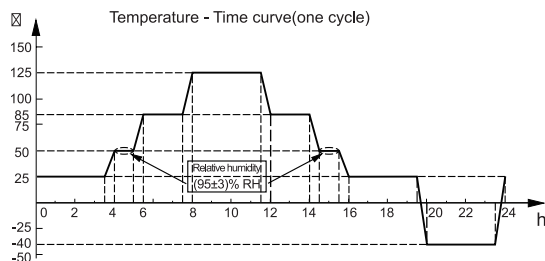
Mounting Hole Layout
(Bottom View)



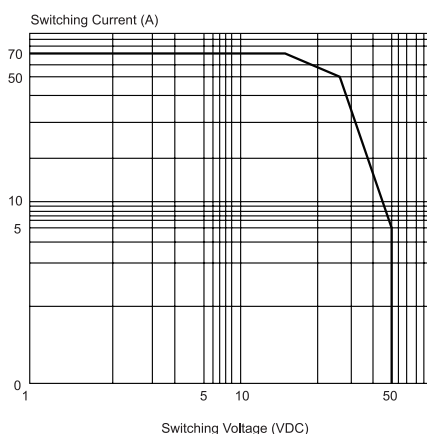
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Reference Data

Temperature curve for electrical endurance test



Max. switching power curve



Part Number Table

Description	Part Number
Automotive Relay, Quick Connect Type, NO, 1.8W, 70A, Unsealed	MPCMA36N-DC12V-A-R
Automotive Relay, Quick Connect Type, NO, 2.0W, 70A, Unsealed	MPCMA36N-DC24V-A-R
Automotive Relay, Quick Connect Type, NO, 1.8W, 70A, Sealed	MPCMA36N-S-DC12V-A-R
Automotive Relay, Quick Connect Type, NO, 2.0W, 70A, Sealed	MPCMA36N-S-DC24V-A-R

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