CMA33 Relay

1.COIL DATA

1-1.Nominal Voltage	12VDC, 24VDC
1-2.Coil Restistance	Refer to Coil Data Chart
1-3.Operate Voltage	Refer to Coil Data Chart
1-4.Release Voltage	Refer to Coil Data Chart
1-5.Coil Power	1.5W(12V), 1.8W(24V)

2.CONTACT DATA

2-1.Contact Form	C-1 form C, A-1 form A
2-2.Contact Material	Ag Alloy

2-3.Contact Rating

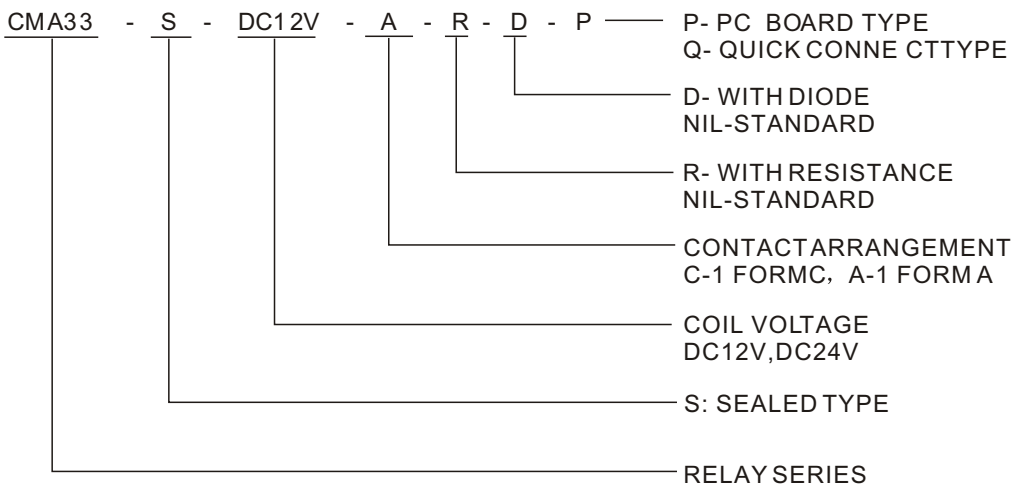
Type		12VDC coil voltage	24VDC coil voltage
Rating(resistive load)	Nominal Switchig Capacity	N.O.:35A 14VDC N.C.:20A 14VDC	N.O.:15A 28VDC N.C.: 8A 28VDC
	85℃ Switching Current	N.O.:20A(14VDC) N.C.:10A(14VDC)	N.O.:15A(28VDC) N.C.:8A(14VDC)

2-4.Max.Switching Power	490W(12V coil voltage) 420W(24V coil voltage)
2-5.Contact Resistance	Max50mΩ.(6VDC 1A)
2-6.Life	
Electrical	100,000 operations
Mechanical	1,000,000 operations

3.GENERAL DATA

3-1.Insulation Resistance	Min.20MΩ 500VDC
3-2.Dielectric Strength	500VAC,1min between open contacts
	500VAC,1min between coil and contacts
3-3.Operate Time	Max.10ms
3-4.Release Time	Max.10ms
3-5.Operate Temperature	-40 ~ +85℃
3-6.Shock Resistance	
Endurance	200m/s^2
Misoperation	1000m/s^2
3-7.Vibration Resistance	
Endurance	10 -500Hz, 44.1m/s^2(45m/s^2)
Misoperation	10 -2,000Hz, 44.1m/s^2(45m/s^2)
3-8.Weight	Approximately 18g

4. ORDER CODE

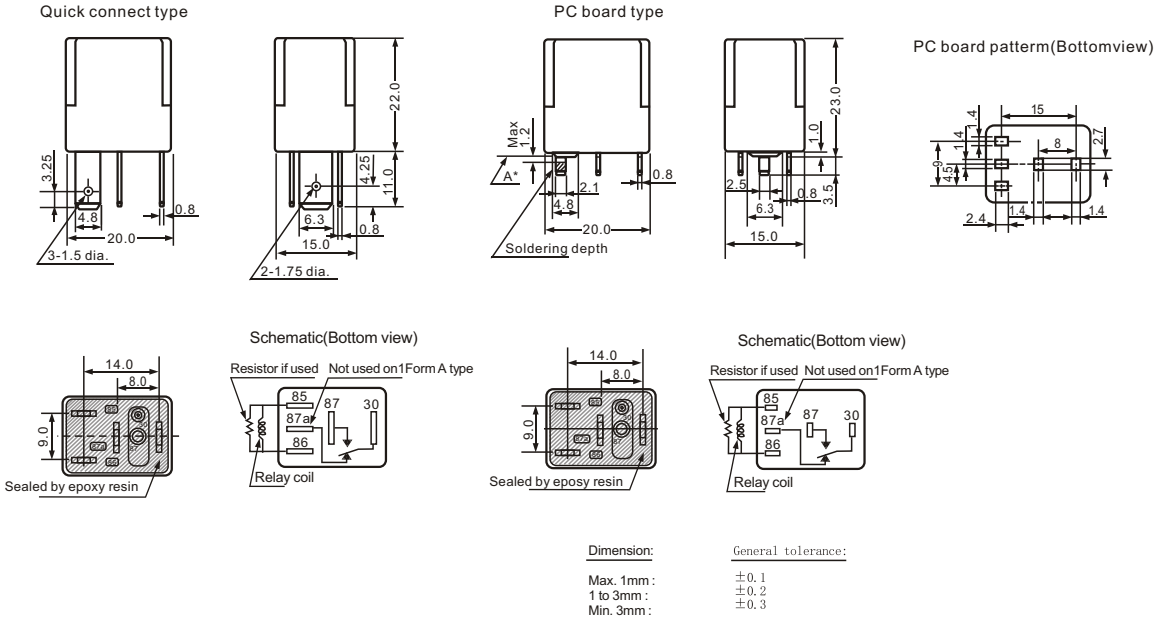


5.COIL DATA CHART

20℃

Model	Coil Voltage VDC	Coil Resistance Ω +/-10%	Shunt-wound Resistance (Ω)	Operate Voltage ≤VDC	Release Voltage ≥VDC	Coil Power mW
CMA33-(S)- DC12V	12	96	680	7.2	1.2	1500 R:1800
CMA33-(S)-DC24V	24	320	2700	14.4	2.4	1800 R:2000

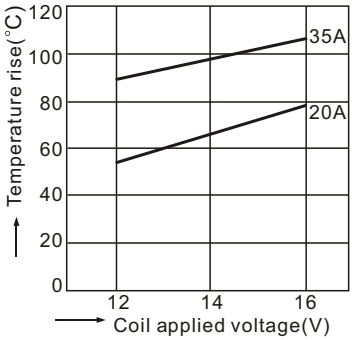
6.DIMENSIONS（mm)



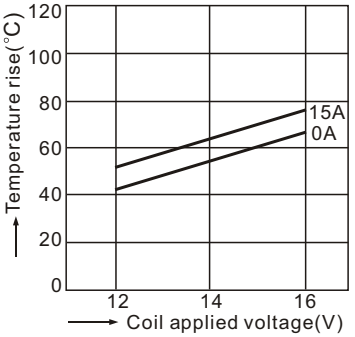
*Dimensions(thickness and width) of terminal specified in this catalog is measured before pre-soldering.
Intervals between terminals is measured at Asurfacs level.

7. CMA33 CHARACTERISTIC DATA

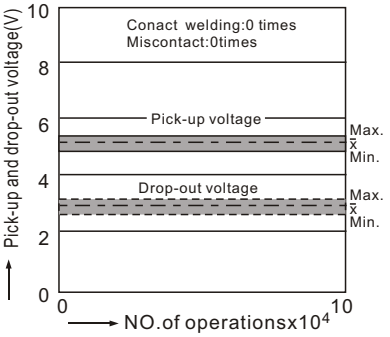
Coil temperature rise(12V type)



Coil temperature rise(24V type)



Electrical life test(12V resistive load)



Electrical test(Lamp load)

Circuit: