

CUSTOMER'S NAME

MOUSER ELECTRONICS

ALPHA REFERENCE NO.

SP16030073

## SPECIFICATION

PART NO.	ALPHA MODEL NAME
1.	MF01-N-221-A04

MODEL NAME
MODEL NO.

APPROVAL
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PREPARED BY	REVIEWED BY	APPROVED BY



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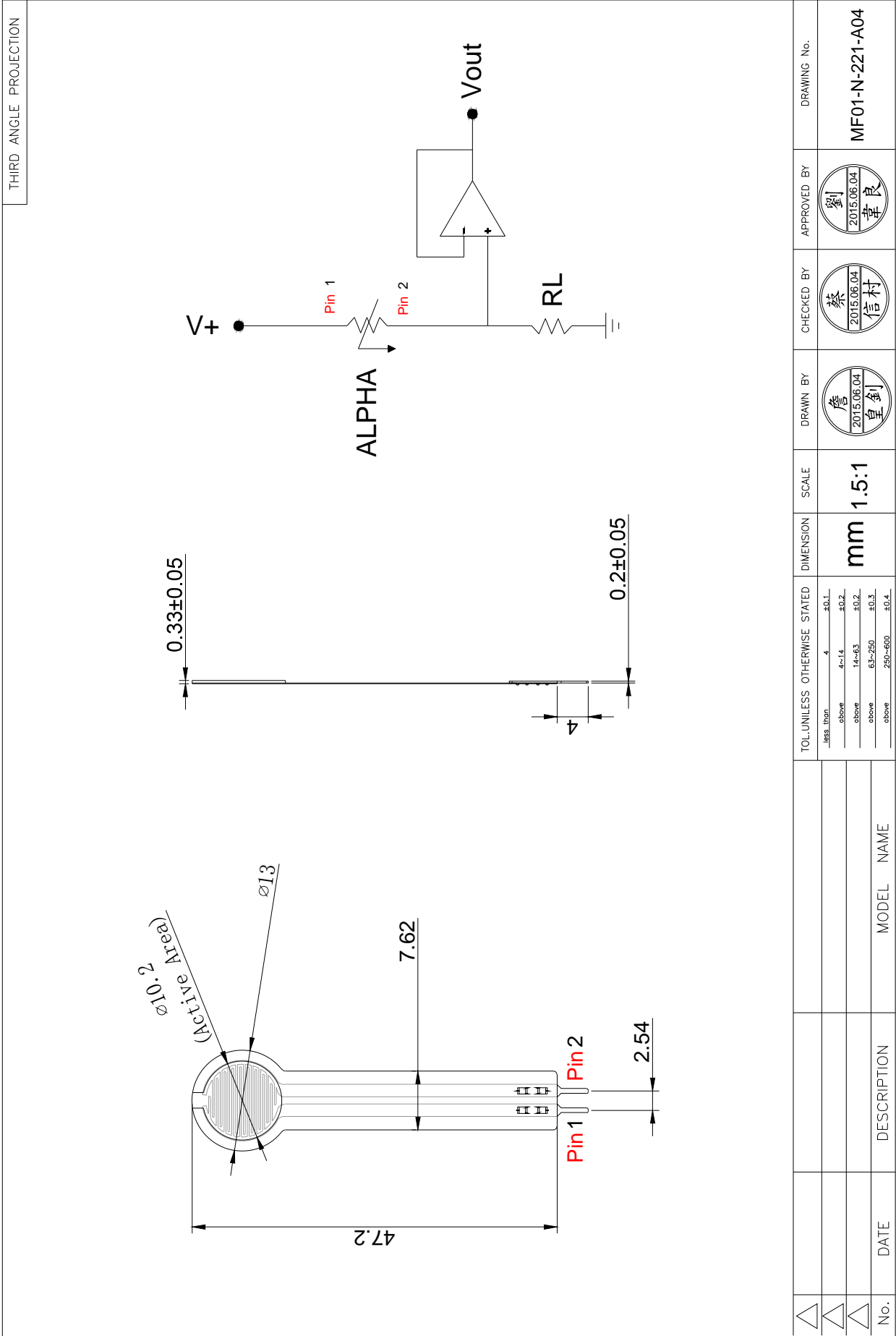
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規格書

SPECIFICATION

Model name:MF01-N-221-A04

檢驗項目 Inspection Item	規格 SPEC.	備註 Notes
起始按壓力 Actuation Force	10g	
按壓力靈敏度範圍 Force Sensitivity Range	10~1000g(0.1~9.8N)	
再現性 Force Repeatability (Single Part)	±5%	
再現性 Force Repeatability (Part To Part)	±20%	
解析度 Force Resolution	Continuous(Analog)	
有效區域 Active Area	10.2 mm diameter	
未按壓阻值 Stand-Off Resistance(Unloaded)	>20MΩ	
反應時間 Response Time	<1 ms	
操作溫度 Operation Temp.	-20°C to +70°C	
使用壽命 Life Cycle	1 million	Without Failure
厚度 Thickness	0.33±0.05 mm	

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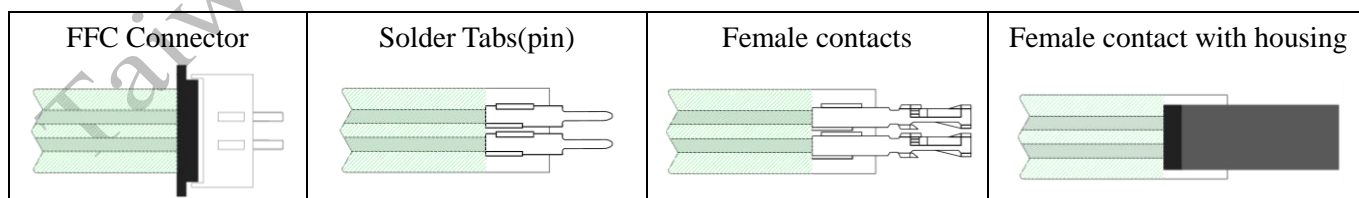
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## Membrane sensor usage tips

Please follow the below stipulate to avoid error conditions such as false triggering, false readings, pre-loading, or gouging and cracking of the sensor.

1. The side of adhesive should be used on the firm, flat and smooth surfaces, can't not be used on the curved surfaces. Also, be careful of trapped air bubbles or dirt particles when laminating the membrane sensor to surface, it cause the sensor to appear loaded in the absence of an external load. Recommended to clean the surface before adhesive.
2. Do not kink, bending or scratches the tail of membrane sensors. The traces should not be bent more than 90° as the silver conductive leads could break. Also, be careful if bending the tail near the active area. This can cause stress on the active area and may result in pre-loading and false readings.
3. Do not block the vent. This vent assures pressure equilibrium with the environment, as well as allowing even loading and unloading of the device. Blocking this vent could cause sensors to respond to any actuation in a non-repeatable manner.
4. Please use an overlay, such as a polycarbonate film or an elastomer, to prevent gouging of the membrane sensors from sharp objects.
5. Do be careful of kinks or dents in active areas. They can cause false triggering of the sensors.
6. Do not apply excessive shear force. This can cause delamination of the layers.
7. Do not exceed 1mA of current per square centimeter of applied force (actuator area). This can irreversibly damage the device.
8. The sensors are not designed for use under water. The sensors are not compatible with direct liquid contact. Sensors are ideally suited to placement behind a waterproof enclosure.
9. With flexible substrates, the solder joint will not hold and the substrate can easily melt and distort if solder directly to the exposed silver traces. Choose standard connection, such as FFC connector, solder tabs, female contacts, or female contact with housing connectors.



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