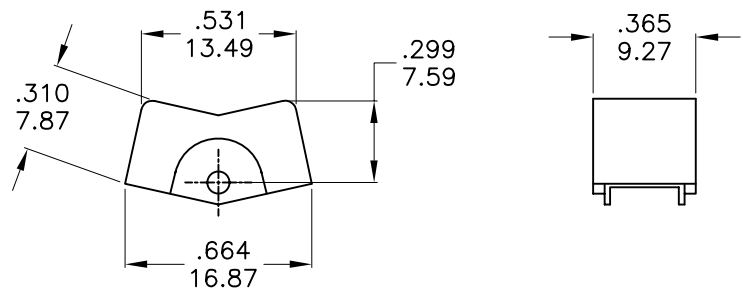


Model No.	POS.1	POS.2	POS.3
3MS1	ON	NONE	ON
Term. Comm.	2-3	N/A	2-1
SCHEMATIC		N/A	

SWITCH FUNCTION

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SPECIFICATIONS

MECHANICAL LIFE: 40,000 make-and-break cycles.
CONTACT RESISTANCE: 10mΩ max. initial @ 2-4VDC
 100mA for both silver and gold plated contacts.
INSULATION RESISTANCE: 1,000MΩ min.
DIELECTRIC STRENGTH: 1,000 V RMS@sea level.
OPERATING TEMPERATURE: -30°C to 85°C.

MATERIALS

CASE: Dially phthalate (DAP) (UL94v-0).
ACTUATOR: Nylon, black std.
BUSHING: Brass, nickel plated.
HOUSING: Stainless Steel.
SWITCH SUPPORT: Brass, Tin plated.
TERMINAL/CONTACT: Brass, Silver or gold plated.
RoHS: 2002/95/EC

RATING :

R : 0.4 Volt-Amps(VA) max. @20V max.(AC or DC)
 Q : 2Amps @250VAC
 5Amps @120 VAC or 28 VDC

德利威電子股份有限公司
DAILYWELL ELECTRONICS CO.,LTD.

符號	原尺寸	修改後尺寸	變更日期	SCALE (比例) : 3 : 2	TITLE 圖名	Miniature Rocker & Paddle Switches	SIZE 圖紙	A4		
1	(A)			TOLERANCE (公差) : 0.00 mm ± 0.25mm 0.0 mm ± 0.40mm ANGULAR : ± 5° FILE NAME : 3MSP0516	DWG NO. 圖號	3MS1J1021M6QES	UNIT 單位	inch mm		
2	(B)				REV. 版本	A	DATE 日期	FEB - 21 - 2008	SHEET 張數	1 of 1
3	(C)				CHECKED BY 審核	RICHARD		DRAWN BY 製圖	FION	
4	(D)									
5	(E)									



3MS1 RX(JX) SERIES SPECIFICATION

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1. Style

This specification describes “Miniature Rocker & Paddle Switches, mainly used as signal switch of electric devices, with the general requirements of mechanical and electrical characteristic.

Operating Temperature Range : -30°C~+85°C.

2. Contact Rating:

2.1 Silver Plating Standard :

Plating		Rating
Q=Silver	Fixed Terminal : Silver plated over copper alloy. Movable contact : Silver plated over copper alloy.	5Amps @120VAC or 28VDC. 2Amps @250VAC.
C=Gold over silver	Fixed Terminal : Copper alloy with silver plated over gold plate. Movable contact : Copper alloy with silver plated over gold plate.	
S=Silver, pure-tin	Fixed Terminal : Copper alloy with silver plated , pure-tin. Movable contact : Silver plated over copper alloy.	
K=Gold over silver pure-tin	Fixed Terminal : Copper alloy with silver plated over gold plate, pure-tin. Movable contact : Copper alloy with silver plated over gold plate.	



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2.2 Gold Plating Standard :

Plating		Rating
R=Gold	Fixed Terminal : Copper alloy with gold plate over nickel plate.	0.4 VA Max. @20VAC or DC Max.
	Movable contact : Copper alloy with gold plate over nickel plate.	
G=Gold, pure-tin	Fixed Terminal : Copper alloy with gold plated over nickel plate, pure-tin .	
	Movable contact : Copper alloy with gold plated over nickel plate.	

3. Type of Actuation: Miniature Rocker & Paddle Switches.

4. Test Sequence:

ELECTRIC PERFORMANCE	ITEM	DESCRIPTION	TEST CONDITIONS	REQUIREMENTS
	1	Visual Examination	By Visual Examination check without and out pressure & testing.	There shall be no defects that affect the serviceability of the product.
	2	Contact Resistance	@2-4VDC 100mA. For both silver and gold plated contacts.	10mΩ Max
	3	Insulation Resistance	Measurements shall be made following application of 1000 V/ DC 100mA potential across terminals and cover for 1 minute.	1000MΩ min/1000V
	4	Dielectric Withstanding Voltage	1000 VAC(50Hz or 60Hz) 0.5mA shall be applied across terminals and cover for 1 minute.	There shall be no breakdown or flashover.



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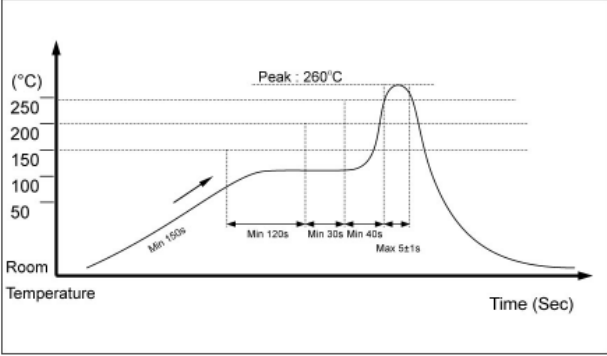
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ITEM	DESCRIPTION	TEST CONDITIONS	REQUIREMENTS
MECHANICAL PERFORMANCE	5 Solder Heat Resistance	①Manual Soldering : Soldering Temperature : Max. 350°C Continuous Soldering Time : 5 seconds (Max). ②WAVE Soldering : Soldering Temperature: 260±5°C. Duration of Solder Immersion: 5 ±1 seconds Temperature Profile  ③Frequency of Soldering Process 2 times max. (PCB is 1.6mm in thickness) ■ Precautions in Handling Care should be exercised so that flux from the upper part of the printed circuit board does not adhere to the switch.	①Shall be free from pronounced backlash and falling-off or breakage terminals. ②As shown in item 2~4.
	6	Vibration	Shall be vibrated in accordance with Method 201A of MIL-STD-202F ①Frequency: 10-55-10Hz in 1-min/cycle. ②Direction: 3 vertical directions including the directions of operation ③Test time: 2 hours each direction.



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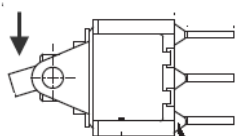
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	ITEM	DESCRIPTION	TEST CONDITIONS	REQUIREMENTS
MECHANICAL PERFORMANCE	7	Shock	Shall be shocked in accordance with Method 213B condition A of MIL-STD-202F ①Acceleration : 50g ②Action time: 11±1m seconds. ③Testing Direction: 6 sides. ④Test Cycle: 3 times in each direction.	As shown in item 2~4
	8	Actuation Force	MODEL-1305N MECHANICAL TEST 500gram 、1000gram 、 2000gram. Test method : 	At for test the force. Force: 600±150grams
OPERATING LIFE	9	Operating Life	Measurements shall be made following the test forth below: ①5A@120VAC resistive load—silver plated. 2A@250VAC resistive load—silver plated. 0.4VA max@ 20VAC max resistive load—gold plated. ② Rate of Operation: 6-8 operation cycles per minute. ③ Electronics Life Test: 6,000 cycles.	① Dielectric Strength : 1000V. ② Insulation Resistance: 1000MΩ min.
			Mechanical Life Test: 40,000 cycles.	Contact Resistance: 10mΩ Max.
HUMIDITY RESISTANCE	10	Resistance Low Temperature	Following the test set forth below the sample shall be left in normal temperature and humidity conditions for 1 hour before the measurements are made: ①Temperature: -30±3°C ②Time: 96 hours.	As shown in item 2~4.



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HUMIDITY RESISTANCE	ITEM	DESCRIPTION	TEST CONDITIONS	REQUIREMENTS
	11	Resistance High Temperature	<p>Following the test set forth below the sample shall be left in normal temperature and humidity conditions for an hour before the measurements are made:</p> <p>①Temperature:85±2°C ②Time:96 hours.</p>	As shown in item 2~4.
	12	Resistance Humidity	<p>Following the test set forth below the sample shall be left in normal temperature and humidity conditions for an hour before the measurements are made:</p> <p>①Temperature:40±2°C ②Relative Humidity:90~95% ③Time:96 hours.</p>	<p>①Contact Resistance: 10 mΩ Max.</p> <p>②Insulation Resistance: 1000MΩ min.</p>
	13	The Salt Testing	<p>Following the test set forth below the sample shall be left in normal temperature and humidity conditions for an hour before the measurements are made:</p> <p>①Temperature:35±2°C ②The ratio of salt-water : 5% ③The spray amount of salt- water : 1~2 ml/h. ④ Time:48 hours.</p>	The testing standard based on bubble, crack, And magnifying glass with gauge.