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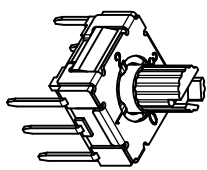
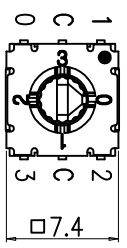
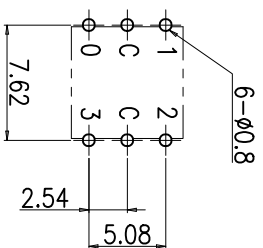
SUNGMUN CODE : MSSM-04
DESCRIPTION : MINI ROTARY DIP SWITCH



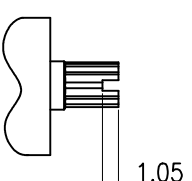
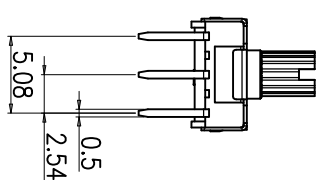
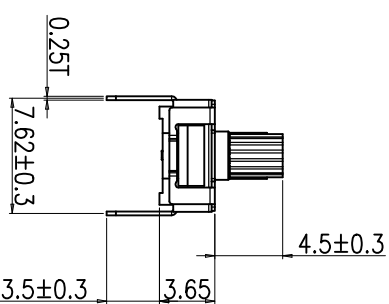
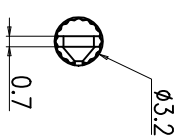
REV. NO.	DATE	REVISION	DR	CH	APP
△	23.10.12	DIN ISO-2768-1m tolerance applied	K.N.KIM	W.J.LEE	K.I.LEE

SPECIFICATION

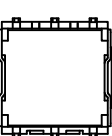
1. Rating : 100mA, DC 42V (Switching)
400mA, DC 42V (None-Switching)
2. Contact Resistance : 80mΩ Max
3. Insulation Resistance : 100MΩ Min at DC 250V
4. Operating Force : 120 ±30gf
5. Life cycle : 25,000 steps
6. Sealing : IP67 (Dust & Water proof)
7. Packing : 70pcs Tube



P.C.B DIMENSION (Top View)



ACTUATOR



P o s i t i o n	Decimal Code				
	C	0	1	2	3
04	0	0	1	2	3
0	●	●			0
1	●		●		1
2	●			●	2
3	●				●
3					3

DRAW/DESIGNED	CHECKED	APPROVED	UNIT	G.TOL	TITLE	
W.J.LEE	J.P.ROH	K.I.LEE	mm	±0.3	MINI ROTARY DIP SWITCH	
2020-03-05	2020-03-05	2020-03-05			SM-MSSM-04	
DIN ISO-2768-1m			SCALE	N/S	MODEL NO.	
Ranges	0.5~3	3~6	6~30	30~120	120~400	MSSM-04-02
Tolerance	±0.1	±0.1	±0.2	±0.3	±0.5	REV.
				SIZE	A4	02

1. Style:

This specification describes "7.4X7.4 size of Mini Rotary Dip Switch" which is M series.

1.1 Operating / Storage Temperature Range : -60°C ~ +125°C

2. Rating:

2.1 None-Switching : 400 mA, DC 42V

2.2 Switching : 100 mA, DC 42V

3. Type of Actuation : Rotating

4. Electrical Characteristics

ITEM	DESCRIPTION	TEST CONDITIONS	REQUIREMENTS
4-1	Visual Examination	By visual examination check without any out pressure & testing.	There shall be no defects that affect the serviceability of the product.
4-2	Contact Resistance	① To be measured between the two terminals associated with each switch pole. ② Measurements shall be made with a 1kHz shall current contact resistance meter.	80mΩ max. (initial)
4-3	Insulation Resistance	250V DC	100 MΩ min.
4-4	Dielectric withstanding Voltage	250V AC(50Hz or 60Hz)shall be applied between all the adjacent terminal and between the terminal and the frame for 1 minute.	There shall be no breakdown or flashover.

5. Mechanical Characteristics

ITEM	DESCRIPTION	TEST CONDITIONS	REQUIREMENTS
5-1	Operation Force	Operating direction shall be clockwise or counter clockwise direction	120gf·cm ±30
5-2	Operation Life	Measurements shall be made following the test set forth below: 1)100mA, 42V DC resistive load 2)Rate of operation: 15~20 cycles/ minute 3)Step of operation: 25,000 steps	1)As shown in item 4-3,4-4 2)Contact Resistance: 200mΩ max 3)Final-after test

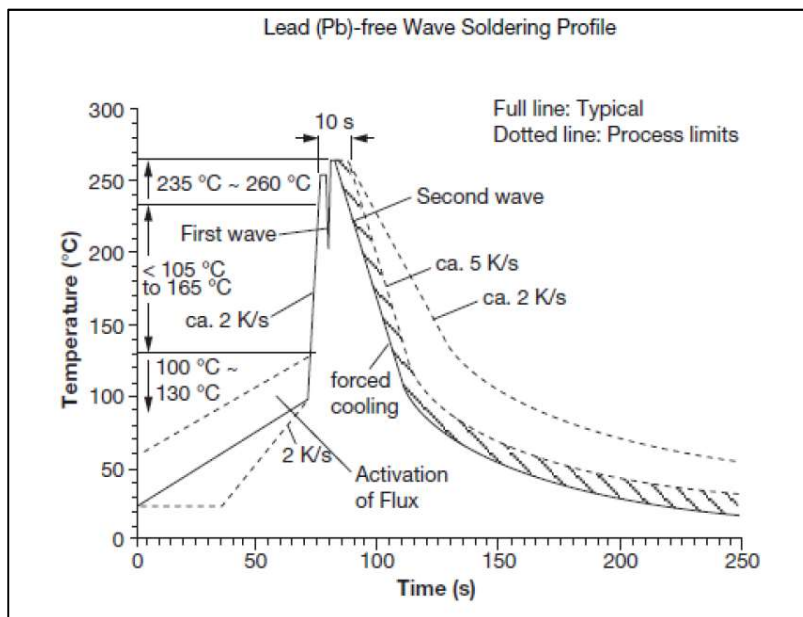
6. Environmental Characteristics

ITEM	DESCRIPTION	TEST CONDITIONS	REQUIREMENTS
6-1	Resistance Low Temperature	Following the test set forth below the sample shall be left in normal temperature and humidity conditions for an hour before measurements are made: 1)Temperature: -60°C ±3°C 2)Time: 96 hours	1)As shown in item 4-3, 4-4, 5-1 2)Contact Resistance: 200mΩ max
6-2	Resistance High Temperature	Following the test set forth below the sample shall be left in normal temperature and humidity conditions for an hour before measurements are made: 1)Temperature: 125°C ±2°C 2)Time: 96 hours	1)As shown in item 4-3, 4-4, 5-1 2)Contact Resistance: 200mΩ max
6-3	Resistance Humidity	Following the test set forth below the sample shall be left in normal temperature and humidity conditions for an hour before measurements are made: 1)Temperature: 40°C ±2°C 2)Relative humidity: 90~95% 3)Time: 96 hours	1)As shown in item 4-4, 5-1 2)Contact Resistance: 200mΩ max 3)Insulation Resistance: 10 MΩ min

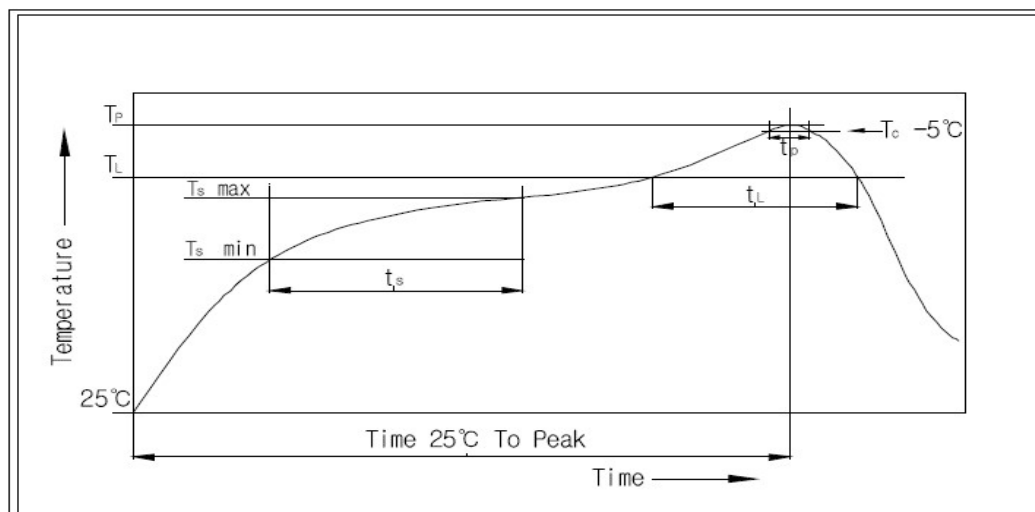
7. This item is "RoHS" Compliant

8. Manual Soldering : Max 350°C, 3 sec.

9. Wave Soldering Conditions:



10. Reflow Soldering Conditions: (SMD type only)



10-1 Condition for Soldering

Profile Feature	Pb-Free Assembly
Average Ramp-UP Rate(Ts max to TP)	3°C/second max
Preheat	
- Temperature Min(Ts min)	150°C
- Temperature Max(Ts max)	200°C
- Time (ts min to ts max)	60-180seconds
Time maintained above:	
- Temperature (TL)	217°C
- Time (tL)	60-150seconds
Peak/Classification Temperature(TP)	260°C +0°C/ -5°C
Time within 5°C of actual Peak Temperature(TP)	Min 30 seconds
Ramp-Down Rate	6°C/sec max
Time 25°C to Peak Temperature	8 minutes max



DATA SHEET

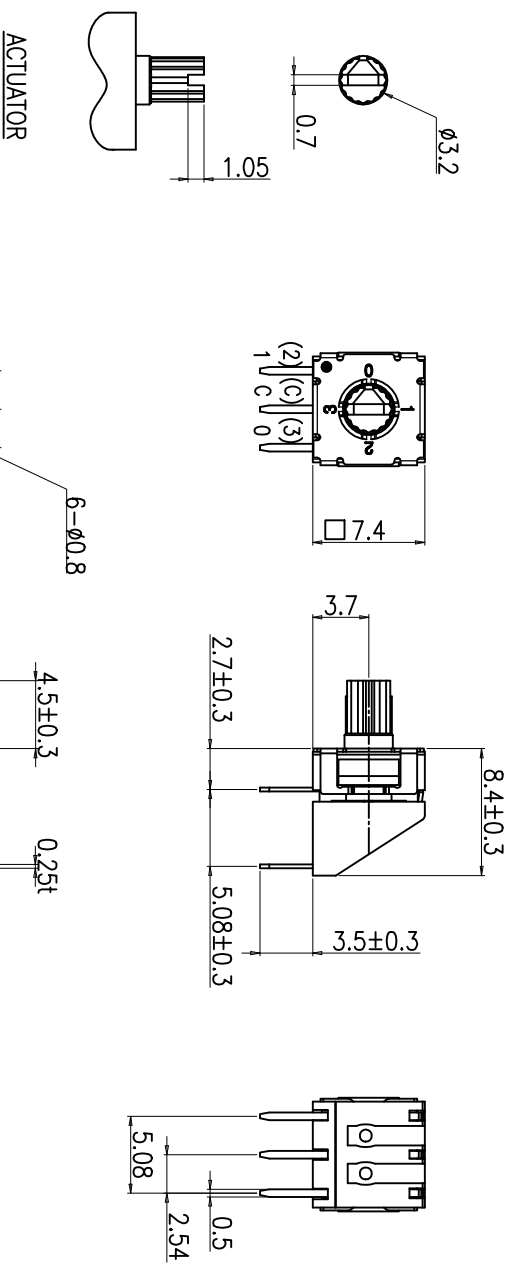
SUNGMUN CODE : MSSM-04H
DESCRIPTION : MINI ROTARY DIP SWITCH



REV. NO.	DATE	REVISION	DR	CH	APP
△	23.10.13	DIN ISO-2768-1m tolerance applied	K.N KIM	W.J LEE	K.I LEE

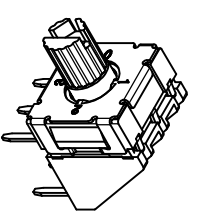
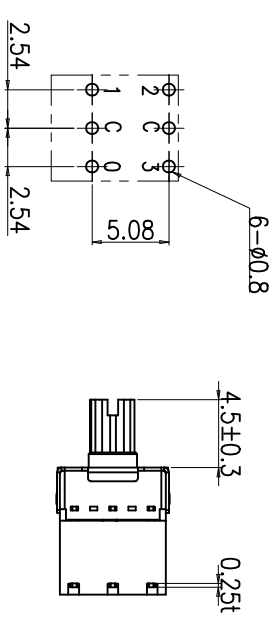
SPECIFICATION

1. Rating : 100mA, DC 42V (Switching)
400mA, DC 42V (None-Switching)
2. Contact Resistance : 80mΩ Max
3. Insulation Resistance : 100MΩ Min
4. Operating Force : 120±30gf Max
5. Life cycle : 25,000 steps
6. Sealing : IP67 (Dust & Water proof)
7. Packing : 65pcs Tube



Decimal Code					
04	C	0	1	2	3
P	●	●			0
o			●		1
t				●	2
i					3
n	●				3

P.C.B DIMENSION (Top View)



DRAW/DESIGNED		CHECKED		APPROVED		G.TOL		TITLE			
K.N KIM		W.J LEE		K.I LEE		±0.3△		MINI ROTARY DIP SWITCH			
2022-05-19		2022-05-19		2022-05-19		mm		MODEL NO.			
DIN ISO-2768-1m						N:S		SM-MSSM-04H			
Ranges		0.5~3	3~6	6~30	30~120	120~400	SCALE		DRAW NO.		
Tolerance		±0.1	±0.1	±0.2	±0.3	±0.5	SIZE		MSSM-04H-04		
						A4				REV.	
										04	

1. Style:

This specification describes "7.4X7.4 size of Mini Rotary Dip Switch" which is M series.

1.1 Operating / Storage Temperature Range : -60°C ~ +125°C

2. Rating:

2.1 None-Switching : 400 mA, DC 42V

2.2 Switching : 100 mA, DC 42V

3. Type of Actuation : Rotating

4. Electrical Characteristics

ITEM	DESCRIPTION	TEST CONDITIONS	REQUIREMENTS
4-1	Visual Examination	By visual examination check without any out pressure & testing.	There shall be no defects that affect the serviceability of the product.
4-2	Contact Resistance	① To be measured between the two terminals associated with each switch pole. ② Measurements shall be made with a 1kHz shall current contact resistance meter.	80mΩ max. (initial)
4-3	Insulation Resistance	250V DC	100 MΩ min.
4-4	Dielectric withstanding Voltage	250V AC(50Hz or 60Hz)shall be applied between all the adjacent terminal and between the terminal and the frame for 1 minute.	There shall be no breakdown or flashover.

5. Mechanical Characteristics

ITEM	DESCRIPTION	TEST CONDITIONS	REQUIREMENTS
5-1	Operation Force	Operating direction shall be clockwise or counter clockwise direction	120gf·cm ±30
5-2	Operation Life	Measurements shall be made following the test set forth below: 1)100mA, 42V DC resistive load 2)Rate of operation: 15~20 cycles/ minute 3)Step of operation: 25,000 steps	1)As shown in item 4-3,4-4 2)Contact Resistance: 200mΩ max 3)Final-after test

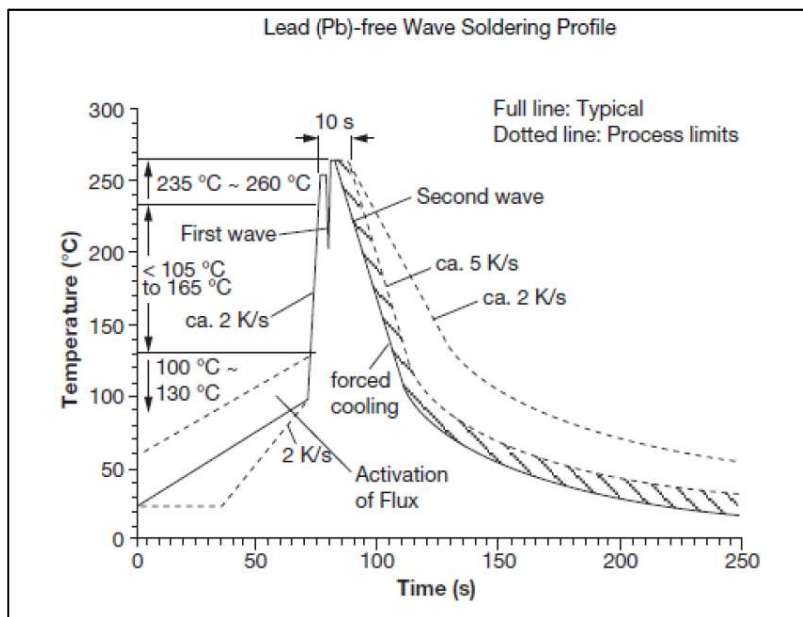
6. Environmental Characteristics

ITEM	DESCRIPTION	TEST CONDITIONS	REQUIREMENTS
6-1	Resistance Low Temperature	Following the test set forth below the sample shall be left in normal temperature and humidity conditions for an hour before measurements are made: 1)Temperature: -60°C ±3°C 2)Time: 96 hours	1)As shown in item 4-3, 4-4, 5-1 2)Contact Resistance: 200mΩ max
6-2	Resistance High Temperature	Following the test set forth below the sample shall be left in normal temperature and humidity conditions for an hour before measurements are made: 1)Temperature: 125°C ±2°C 2)Time: 96 hours	1)As shown in item 4-3, 4-4, 5-1 2)Contact Resistance: 200mΩ max
6-3	Resistance Humidity	Following the test set forth below the sample shall be left in normal temperature and humidity conditions for an hour before measurements are made: 1)Temperature: 40°C ±2°C 2)Relative humidity: 90~95% 3)Time: 96 hours	1)As shown in item 4-4, 5-1 2)Contact Resistance: 200mΩ max 3)Insulation Resistance: 10 MΩ min

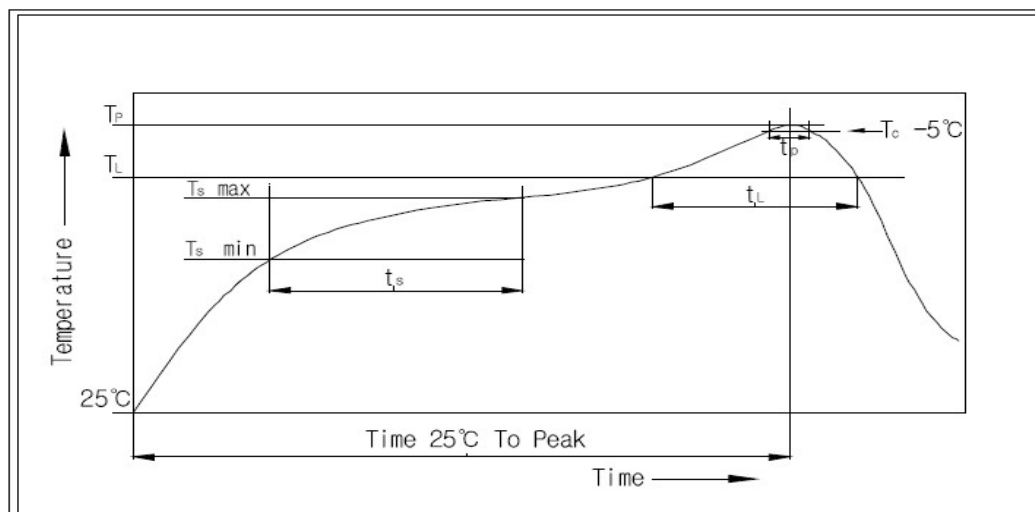
7. This item is "RoHS" Compliant

8. Manual Soldering : Max 350°C, 3 sec.

9. Wave Soldering Conditions:



10. Reflow Soldering Conditions: (SMD type only)



10-1 Condition for Soldering

Profile Feature	Pb-Free Assembly
Average Ramp-UP Rate(Ts max to TP)	3°C/second max
Preheat	
- Temperature Min(Ts min)	150°C
- Temperature Max(Ts max)	200°C
- Time (ts min to ts max)	60-180seconds
Time maintained above:	
- Temperature (TL)	217°C
- Time (tL)	60-150seconds
Peak/Classification Temperature(TP)	260°C +0°C/ -5°C
Time within 5°C of actual Peak Temperature(TP)	Min 30 seconds
Ramp-Down Rate	6°C/sec max
Time 25°C to Peak Temperature	8 minutes max



DATA SHEET

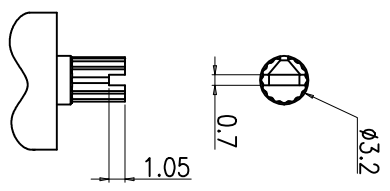
SUNGMUN CODE : MSSM-04H1
DESCRIPTION : MINI ROTARY DIP SWITCH



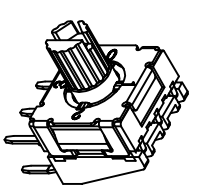
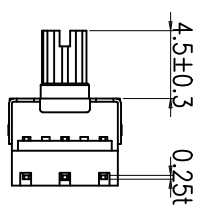
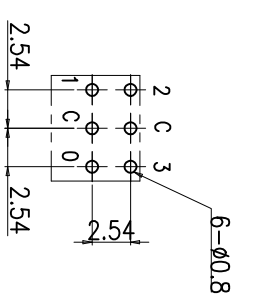
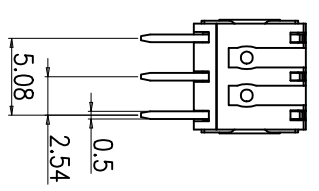
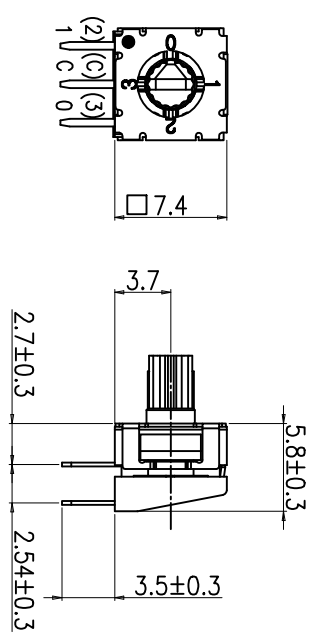
REV. NO.	DATE	REVISION	DR	CH	APP
△	23.10.13	DIN ISO-2768-1m tolerance applied	H.S LEE	K.N KIM	W.J LEE

SPECIFICATION

1. Rating : 100mA, DC 42V (Switching)
400mA, DC 42V (None-Switching)
2. Contact Resistance : 80mΩ Max
3. Insulation Resistance : 100MΩ Min
4. Operating Force : 120±30gf Max
5. Life cycle : 25,000 steps
6. Sealing : IP67 (Dust & Water proof)
7. Packing : 65pcs Tube



ACTUATOR



P o s i t i o n	Decimal Code					
	C	0	1	2	3	
04	0	0	1	2	3	
0	●	●			0	
1	●		●		1	
2	●			●	2	
3	●				●	3

P.C.B DIMENSION (Top View)

DRAW/DESIGNED	CHECKED	APPROVED	UNIT	SCALE	MODEL NO.	TITLE
J.S YANG	W.J LEE	K.I LEE	mm	±0.3	SM-MSSM-04H1	MINI ROTARY DIP SWITCH
DIN ISO-2768-1m						
Ranges	0.5~3	3~6	6~30	30~120	120~400	
Tolerance	±0.1	±0.1	±0.2	±0.3	±0.5	
DATE	2021-11-05	2021-11-05	2021-11-05			
DESIGNER	J.S YANG	CHECKER	W.J LEE	APPROVER	K.I LEE	
COMPANY	SUNGMIN ELECTRONICS CO.,LTD					
DRAW NO.	MSSM-04H1-04	REV.	04			

1. Style:

This specification describes "7.4X7.4 size of Mini Rotary Dip Switch" which is M series.

1.1 Operating / Storage Temperature Range : -60°C ~ +125°C

2. Rating:

2.1 None-Switching : 400 mA, DC 42V

2.2 Switching : 100 mA, DC 42V

3. Type of Actuation : Rotating

4. Electrical Characteristics

ITEM	DESCRIPTION	TEST CONDITIONS	REQUIREMENTS
4-1	Visual Examination	By visual examination check without any out pressure & testing.	There shall be no defects that affect the serviceability of the product.
4-2	Contact Resistance	① To be measured between the two terminals associated with each switch pole. ② Measurements shall be made with a 1kHz shall current contact resistance meter.	80mΩ max. (initial)
4-3	Insulation Resistance	250V DC	100 MΩ min.
4-4	Dielectric withstanding Voltage	250V AC(50Hz or 60Hz)shall be applied between all the adjacent terminal and between the terminal and the frame for 1 minute.	There shall be no breakdown or flashover.

5. Mechanical Characteristics

ITEM	DESCRIPTION	TEST CONDITIONS	REQUIREMENTS
5-1	Operation Force	Operating direction shall be clockwise or counter clockwise direction	120gf·cm ±30
5-2	Operation Life	Measurements shall be made following the test set forth below: 1)100mA, 42V DC resistive load 2)Rate of operation: 15~20 cycles/ minute 3)Step of operation: 25,000 steps	1)As shown in item 4-3,4-4 2)Contact Resistance: 200mΩ max 3)Final-after test

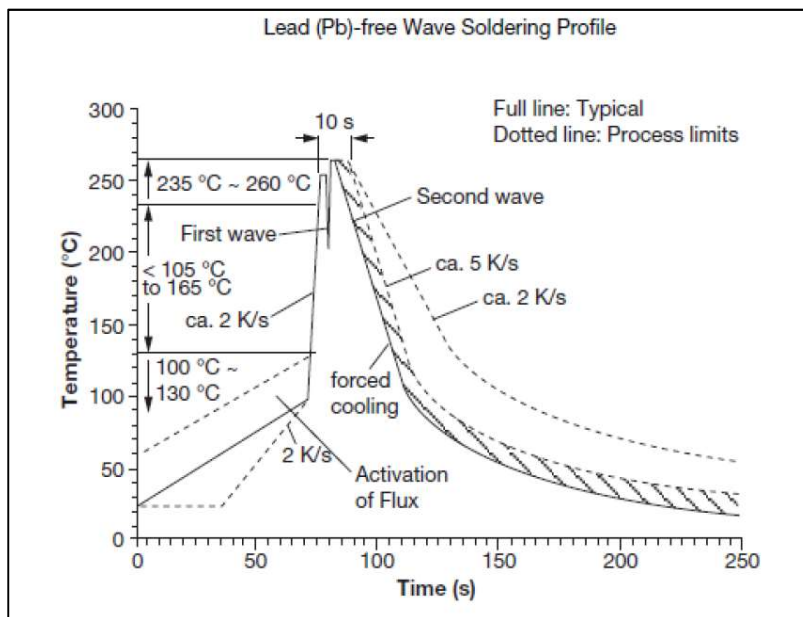
6. Environmental Characteristics

ITEM	DESCRIPTION	TEST CONDITIONS	REQUIREMENTS
6-1	Resistance Low Temperature	Following the test set forth below the sample shall be left in normal temperature and humidity conditions for an hour before measurements are made: 1)Temperature: -60°C ±3°C 2)Time: 96 hours	1)As shown in item 4-3, 4-4, 5-1 2)Contact Resistance: 200mΩ max
6-2	Resistance High Temperature	Following the test set forth below the sample shall be left in normal temperature and humidity conditions for an hour before measurements are made: 1)Temperature: 125°C ±2°C 2)Time: 96 hours	1)As shown in item 4-3, 4-4, 5-1 2)Contact Resistance: 200mΩ max
6-3	Resistance Humidity	Following the test set forth below the sample shall be left in normal temperature and humidity conditions for an hour before measurements are made: 1)Temperature: 40°C ±2°C 2)Relative humidity: 90~95% 3)Time: 96 hours	1)As shown in item 4-4, 5-1 2)Contact Resistance: 200mΩ max 3)Insulation Resistance: 10 MΩ min

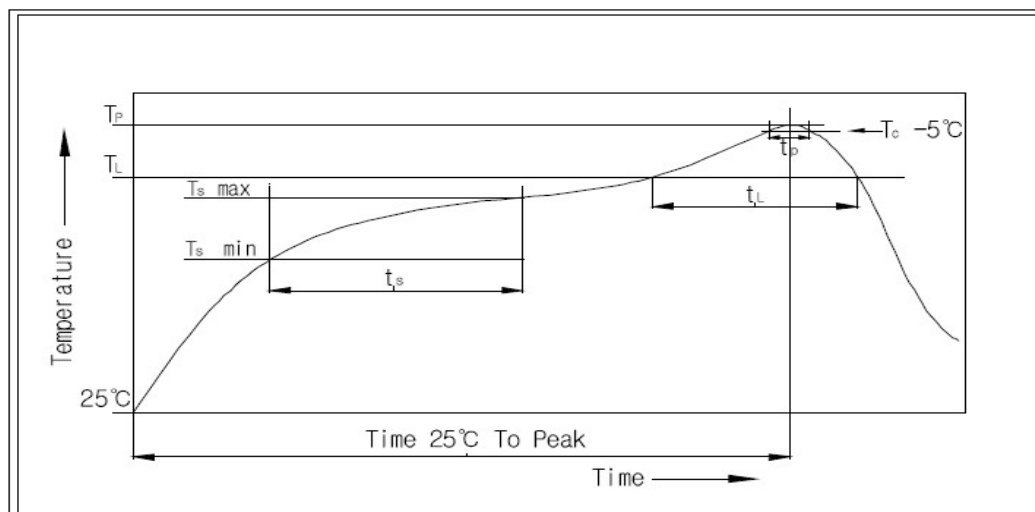
7. This item is "RoHS" Compliant

8. Manual Soldering : Max 350°C, 3 sec.

9. Wave Soldering Conditions:



10. Reflow Soldering Conditions: (SMD type only)



10-1 Condition for Soldering

Profile Feature	Pb-Free Assembly
Average Ramp-UP Rate(Ts max to TP)	3°C/second max
Preheat	
- Temperature Min(Ts min)	150°C
- Temperature Max(Ts max)	200°C
- Time (ts min to ts max)	60-180seconds
Time maintained above:	
- Temperature (TL)	217°C
- Time (tL)	60-150seconds
Peak/Classification Temperature(TP)	260°C +0°C/ -5°C
Time within 5°C of actual Peak Temperature(TP)	Min 30 seconds
Ramp-Down Rate	6°C/sec max
Time 25°C to Peak Temperature	8 minutes max



DATA SHEET

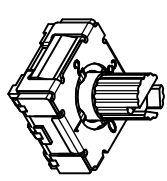
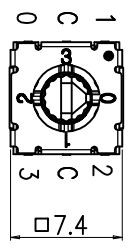
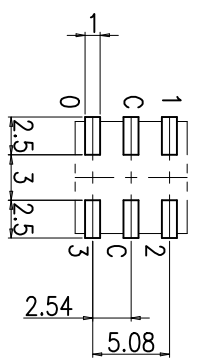
SUNGMUN CODE : MSSM-04J-TR
DESCRIPTION : MINI ROTARY DIP SWITCH



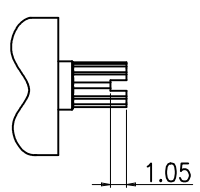
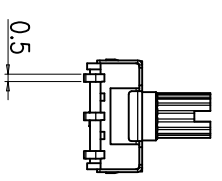
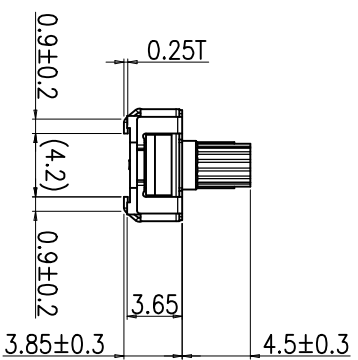
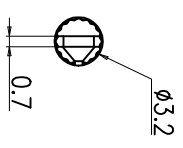
REV. NO.	DATE	REVISION	DR	CH	APP
△					

SPECIFICATION

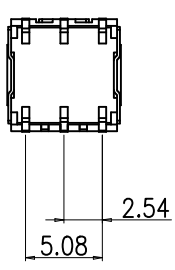
1. Rating : 100mA, DC 42V (Switching)
400mA, DC 42V (None-Switching)
2. Contact Resistance : 80mΩ Max
3. Insulation Resistance : 100MΩ Min at DC 250V
4. Operating Force : 120 ±30gf
5. Life cycle : 25,000 steps
6. Sealing : IP67 (Dust & Water proof)
7. Packing : 70pcs Tube / 600pcs Reel Packing



P.C.B DIMENSION (Top View)



ACTUATOR



Decimal Code					
04	C	0	1	2	3
P	●	●			0
o			●		1
s	●			●	2
i					3
t	●				3
i					3
n					3

DRAW/DESIGNED		CHECKED		APPROVED		G.TOL		TITLE	
K.N KIM		W.J LEE		K.I LEE		UNIT mm		MODEL NO.	
2023-10-13		2023-10-13		2023-10-13		SCALE N:S		SM-MSSM-04J	
DIN ISO-2768-1m						SIZE A4		MSSM-04J-01	
RANGES		TOLERANCE		SUNGJUN ELECTRONICS CO.,LTD		DRAW NO.		REV.	
0.5~3	3~6	6~30	30~120	120~400	±0.1	±0.1	±0.2	±0.3	±0.5
SUNGJUN ELECTRONICS CO.,LTD									
MINI ROTARY DIP SWITCH									
01									

1. Style:

This specification describes "7.4X7.4 size of Mini Rotary Dip Switch" which is M series.

1.1 Operating / Storage Temperature Range : -60°C ~ +125°C

2. Rating:

2.1 None-Switching : 400 mA, DC 42V

2.2 Switching : 100 mA, DC 42V

3. Type of Actuation : Rotating

4. Electrical Characteristics

ITEM	DESCRIPTION	TEST CONDITIONS	REQUIREMENTS
4-1	Visual Examination	By visual examination check without any out pressure & testing.	There shall be no defects that affect the serviceability of the product.
4-2	Contact Resistance	① To be measured between the two terminals associated with each switch pole. ② Measurements shall be made with a 1kHz shall current contact resistance meter.	80mΩ max. (initial)
4-3	Insulation Resistance	250V DC	100 MΩ min.
4-4	Dielectric withstanding Voltage	250V AC(50Hz or 60Hz)shall be applied between all the adjacent terminal and between the terminal and the frame for 1 minute.	There shall be no breakdown or flashover.

5. Mechanical Characteristics

ITEM	DESCRIPTION	TEST CONDITIONS	REQUIREMENTS
5-1	Operation Force	Operating direction shall be clockwise or counter clockwise direction	120gf·cm ±30
5-2	Operation Life	Measurements shall be made following the test set forth below: 1)100mA, 42V DC resistive load 2)Rate of operation: 15~20 cycles/ minute 3)Step of operation: 25,000 steps	1)As shown in item 4-3,4-4 2)Contact Resistance: 200mΩ max 3)Final-after test

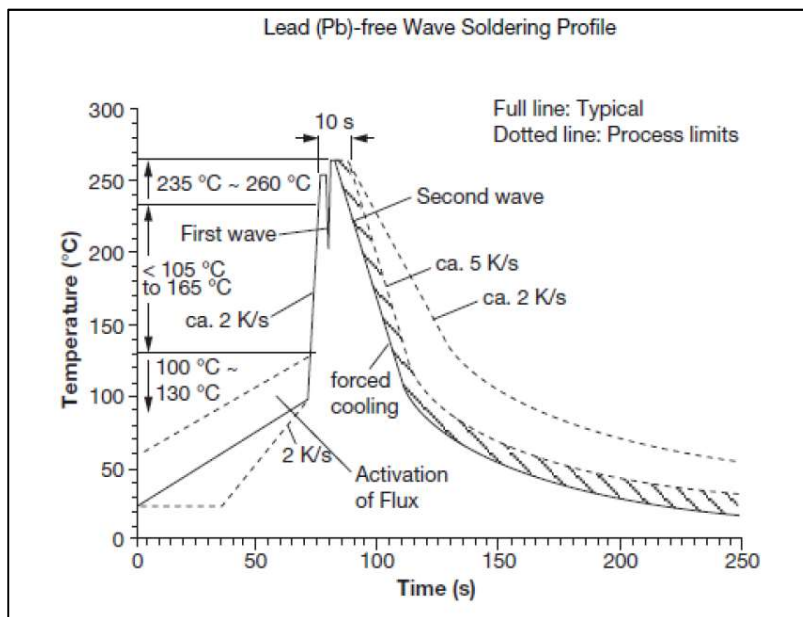
6. Environmental Characteristics

ITEM	DESCRIPTION	TEST CONDITIONS	REQUIREMENTS
6-1	Resistance Low Temperature	Following the test set forth below the sample shall be left in normal temperature and humidity conditions for an hour before measurements are made: 1)Temperature: -60°C ±3°C 2)Time: 96 hours	1)As shown in item 4-3, 4-4, 5-1 2)Contact Resistance: 200mΩ max
6-2	Resistance High Temperature	Following the test set forth below the sample shall be left in normal temperature and humidity conditions for an hour before measurements are made: 1)Temperature: 125°C ±2°C 2)Time: 96 hours	1)As shown in item 4-3, 4-4, 5-1 2)Contact Resistance: 200mΩ max
6-3	Resistance Humidity	Following the test set forth below the sample shall be left in normal temperature and humidity conditions for an hour before measurements are made: 1)Temperature: 40°C ±2°C 2)Relative humidity: 90~95% 3)Time: 96 hours	1)As shown in item 4-4, 5-1 2)Contact Resistance: 200mΩ max 3)Insulation Resistance: 10 MΩ min

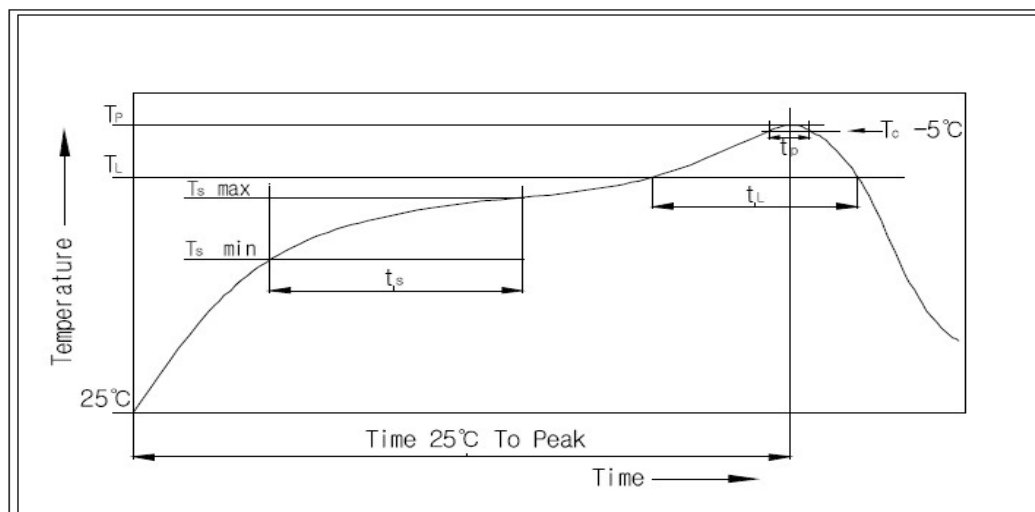
7. This item is "RoHS" Compliant

8. Manual Soldering : Max 350°C, 3 sec.

9. Wave Soldering Conditions:



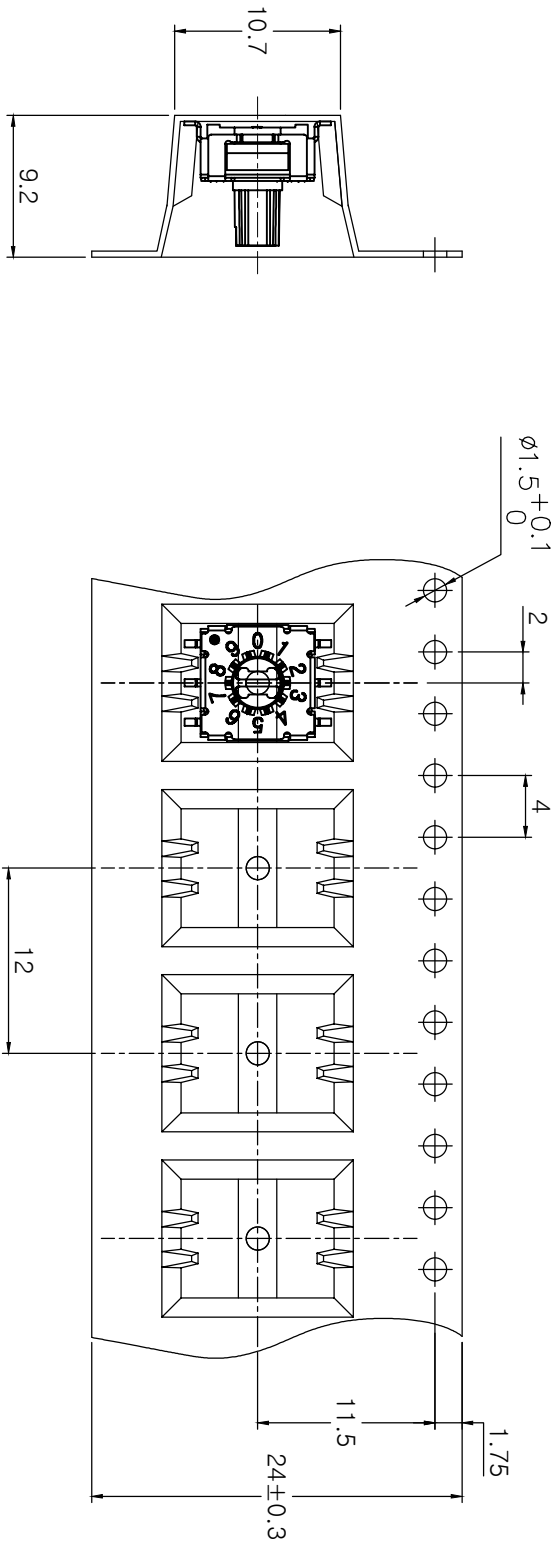
10. Reflow Soldering Conditions: (SMD type only)



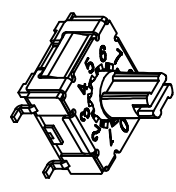
10-1 Condition for Soldering

Profile Feature	Pb-Free Assembly
Average Ramp-UP Rate(Ts max to TP)	3°C/second max
Preheat	
- Temperature Min(Ts min)	150°C
- Temperature Max(Ts max)	200°C
- Time (ts min to ts max)	60-180seconds
Time maintained above:	
- Temperature (TL)	217°C
- Time (tL)	60-150seconds
Peak/Classification Temperature(TP)	260°C +0°C/ -5°C
Time within 5°C of actual Peak Temperature(TP)	Min 30 seconds
Ramp-Down Rate	6°C/sec max
Time 25°C to Peak Temperature	8 minutes max

MRK.	DATE	REVISION	SIGN
△			



DIRECTION OF FEED



Units(pcs)
600

DRAW/DESIGNED	CHECKED	APPROVED	UNIT	G.TOL	TITLE
H.S LEE	K.N KIM	W.J LEE	mm	± 0.3	M Series SC SMD Reel Packing
2022-11-14	2022-11-14	2022-11-14	SCALE	2:1	MODEL NO.
SUNGMUN ELECTRONICS CO.,LTD			SIZE	A4	TR-MSIS,KIO-00SJUD-01
			REV.	01	TR-MSIS,KIO-00SCJUD-01



DATA SHEET

SUNGMUN CODE : MSSM-04S-TR

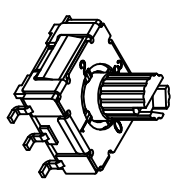
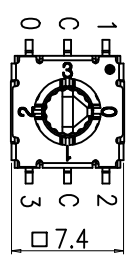
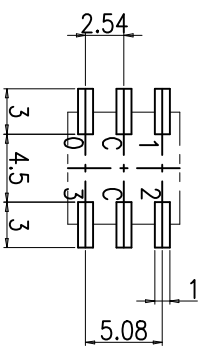
DESCRIPTION : MINI ROTARY DIP SWITCH



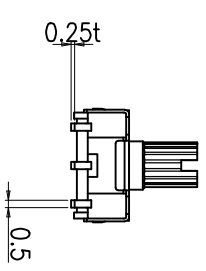
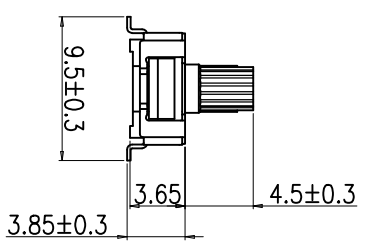
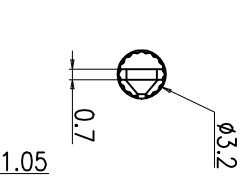
REV. NO.	DATE	REVISION	DR	CH	APP
△	23.10.13	DIN ISO-2768-1m tolerance applied	K.N.KIM	W.J.LEE	K.I.LEE

SPECIFICATION

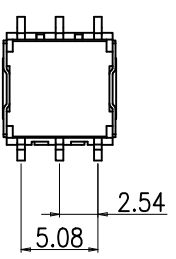
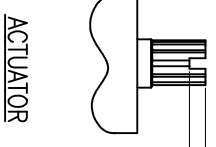
1. Rating : 100mA, DC 42V (Switching)
400mA, DC 42V (None-Switching)
2. Contact Resistance : 80mΩ Max
3. Insulation Resistance : 100MΩ Min
4. Operating Force : 120±30gf Max
5. Life cycle : 25,000 steps
6. Sealing : IP67 (Dust & Water proof)
7. Packing : 70pcs Tube / 600pcs Reel Packing



P.C.B DIMENSION (Top View)



Decimal Code					
04	C	0	1	2	3
P	●	●			0
O			●		1
S	●			●	2
I					3
T	●				3
I					3
O					3
N					3



DRAWN/DESIGNED	J.S YANG	CHECKED	W.J LEE	APPROVED	K.I LEE	G.TOL	±0.3	TITLE	MINI ROTARY DIP SWITCH
	2021-10-13		2021-10-13		2021-10-13		SCALE		MODEL NO.
DIN ISO-2768-1m		UNIT		mm		M/S		DRAW NO.	
Ranges	0.5~3	3~6	6~30	30~120	120~400	SIDE		MSSM-04S-04	
Tolerance	±0.1	±0.1	±0.2	±0.3	±0.5	A4		REV.	
SUNGUM ELECTRONICS CO.,LTD		SUNGUM ELECTRONICS CO.,LTD		SUNGUM ELECTRONICS CO.,LTD		A4		MSSM-04S-04	
2021-10-13		2021-10-13		2021-10-13		A4		04	

1. Style:

This specification describes "7.4X7.4 size of Mini Rotary Dip Switch" which is M series.

1.1 Operating / Storage Temperature Range : -60°C ~ +125°C

2. Rating:

2.1 None-Switching : 400 mA, DC 42V

2.2 Switching : 100 mA, DC 42V

3. Type of Actuation : Rotating

4. Electrical Characteristics

ITEM	DESCRIPTION	TEST CONDITIONS	REQUIREMENTS
4-1	Visual Examination	By visual examination check without any out pressure & testing.	There shall be no defects that affect the serviceability of the product.
4-2	Contact Resistance	① To be measured between the two terminals associated with each switch pole. ② Measurements shall be made with a 1kHz shall current contact resistance meter.	80mΩ max. (initial)
4-3	Insulation Resistance	250V DC	100 MΩ min.
4-4	Dielectric withstanding Voltage	250V AC(50Hz or 60Hz)shall be applied between all the adjacent terminal and between the terminal and the frame for 1 minute.	There shall be no breakdown or flashover.

5. Mechanical Characteristics

ITEM	DESCRIPTION	TEST CONDITIONS	REQUIREMENTS
5-1	Operation Force	Operating direction shall be clockwise or counter clockwise direction	120gf·cm ±30
5-2	Operation Life	Measurements shall be made following the test set forth below: 1)100mA, 42V DC resistive load 2)Rate of operation: 15~20 cycles/ minute 3)Step of operation: 25,000 steps	1)As shown in item 4-3,4-4 2)Contact Resistance: 200mΩ max 3)Final-after test

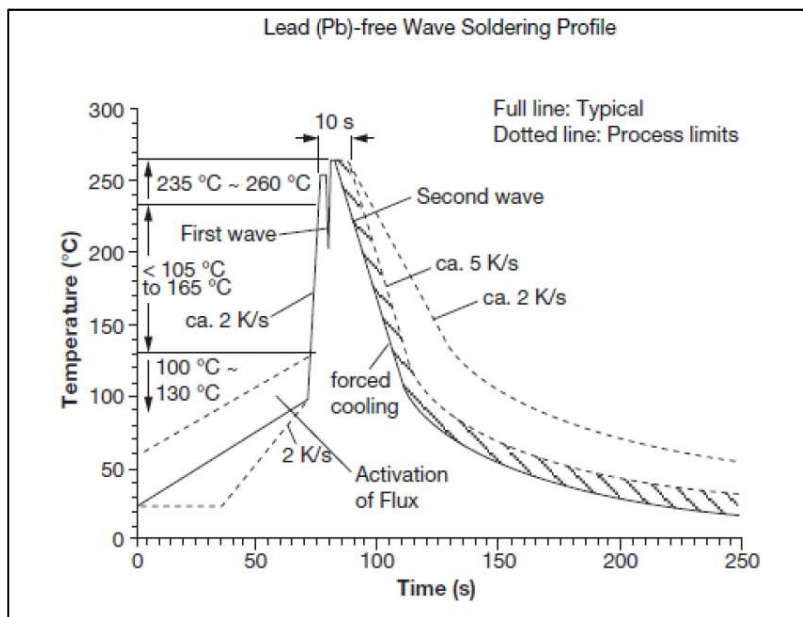
6. Environmental Characteristics

ITEM	DESCRIPTION	TEST CONDITIONS	REQUIREMENTS
6-1	Resistance Low Temperature	Following the test set forth below the sample shall be left in normal temperature and humidity conditions for an hour before measurements are made: 1)Temperature: -60°C ±3°C 2)Time: 96 hours	1)As shown in item 4-3, 4-4, 5-1 2)Contact Resistance: 200mΩ max
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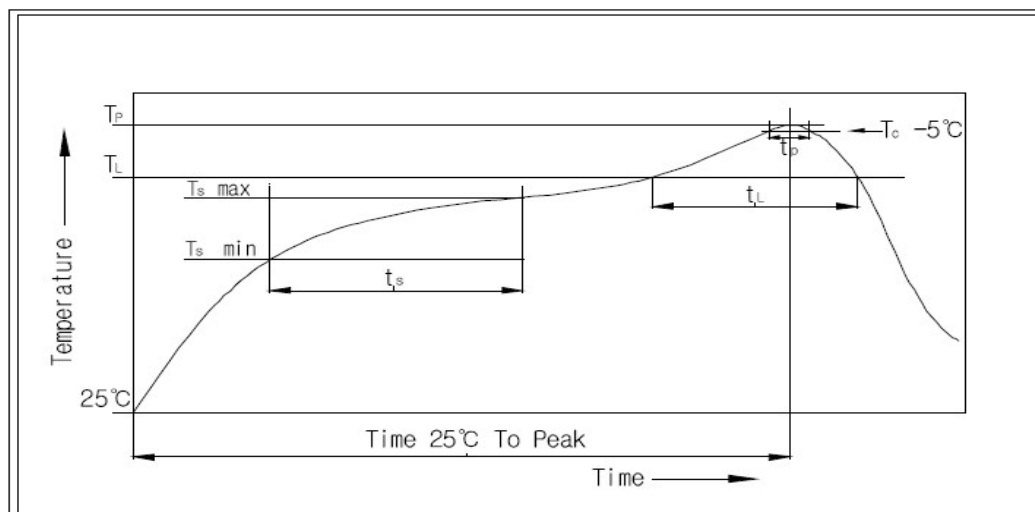
7. This item is "RoHS" Compliant

8. Manual Soldering : Max 350°C, 3 sec.

9. Wave Soldering Conditions:



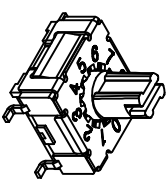
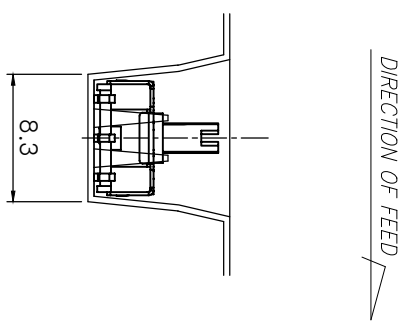
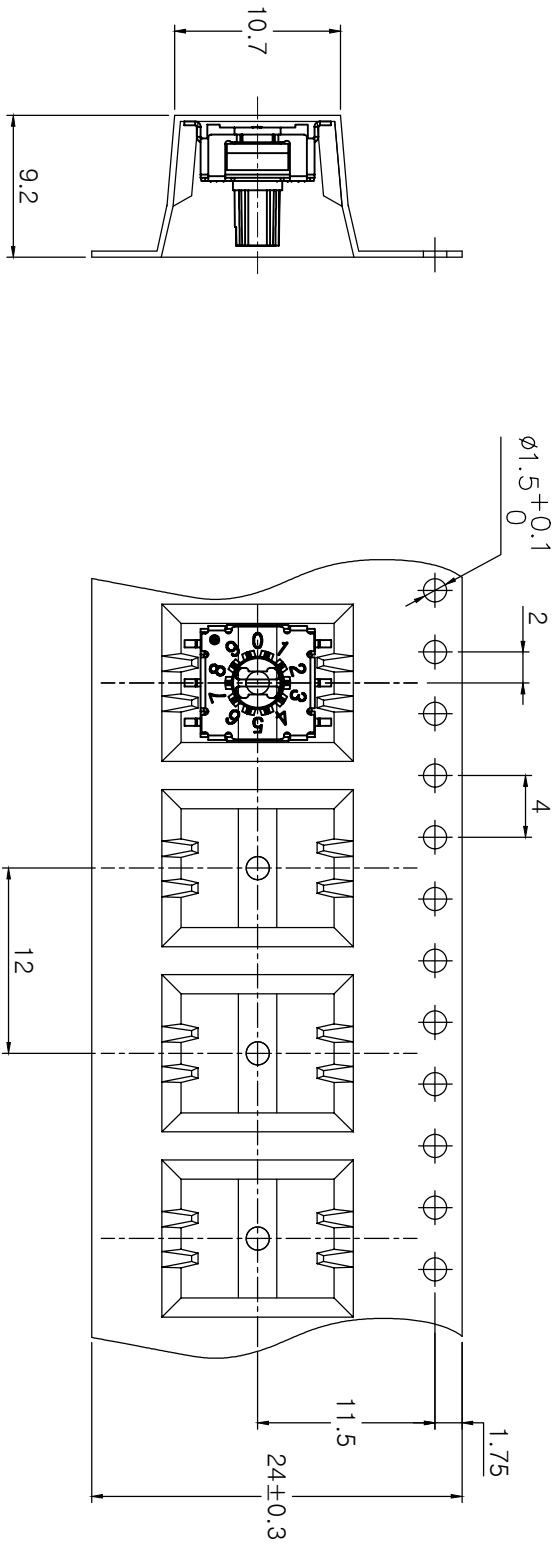
10. Reflow Soldering Conditions: (SMD type only)



10-1 Condition for Soldering

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MRK.	DATE	REVISION	SIGN
△			



Units(pcs)
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DRAW/DESIGNED	CHECKED	APPROVED	UNIT	G.TOL	TITLE
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2022-11-14	2022-11-14	2022-11-14	SCALE	2:1	MODEL NO.
SUNGMUN ELECTRONICS CO.,LTD			SIZE	A4	TR-MSIS,KIO-00SJUD-01
			REV.	01	TR-MSIS,KIO-00SCJUCD-01