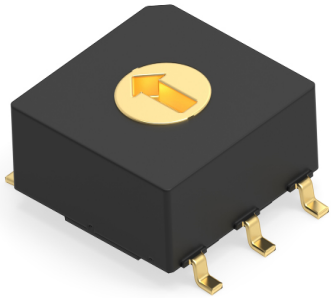
MRSS - MINIATURE ROTARY SWITCH SERIES

PRODUCT DESCRIPTION

The MRSS addresses manual programming applications. These high-quality rotary DIP switches are available in size 7.7mm square (horizontal) and 7.2mm square (vertical) for a wide range of possible applications like elevator and security system. Meanwhile the compact design offers 50% lower profile than standard DIP switches and save space around 40% PCB area. In addition, MRD Series provide more options for terminal, hexadecimal or binary code, with or without complement types to fulfill the variety requirements.

The MRSS Switches are characterised by contact rating of 0.4VA @ 20V DC or AC.

Reference TE customer drawing for application instructions.



FEATURES

- Offer both SMD and THT
- Space saving with a low profile
- High reliability with 2 points contacts
- Hexadecimal or binary code, with complement
- Vertical and horizonal versions
- MSL 1 conformance
- Packaged in Tube and Tape/Reel

APPLICATION

- Elevator
- Single chip
- Security system
- Lighting system
- Machinery
- Telecommunication

MRSS - Miniature rotary switch series

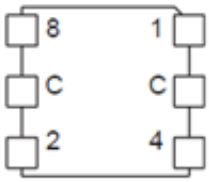
MRSS Series – Type Classification

Rating		0.4VA @ 20V DC or AC MAX.
Contact Resistance		100mΩ MAX @2VDC 10mA initial
Operation Temperature		-40°C to 85°C
Mechanical Life		10,000 steps
Electrical Life		10,000 steps @ 5VDC, 10mA
Withstanding Voltage		250VAC for 1 min
Operation Force		2.0mN-m MIN, 19.6mN·m MAX.
Soldering Conditions	**Manual**	Temp of iron tip: 320°C MAX. for 4±1 sec
	Flow	Preheat 100 to 105°C for 30±5 sec Solder temp 265°C ±3°C for 8±2 sec
	Reflow	Preheat 160 to 190°C for 90 to 120 sec Reflow temp 225°C (switch surface) for 20 to 60 sec Peak temp 255°C (switch surface) MAX.

Material Specifications

Components	Material	Finish	Components	Material	Finish
Case	PSS	Color: Black	Fixed contact	Cu alloy	Au flash
Frame	PSS	Color: Light Brown, Black	Movable contact	Cu alloy	Au plated
Rotar	LCP	Color: White	Holder	SUS	Silver
Plate	SUS	-	-	-	-

Circuit type



Terminal Identification viewed from bottom switch

MRSS - Miniature rotary switch series

R - Real code. 10 and 16 positions.

BDC

CODE	Position									
	0	1	2	3	4	5	6	7	8	9
1		●		●		●		●		●
2			●	●			●	●		
4					●	●	●	●		
8									●	●

Hexadecimal

CODE	Position															
	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
1		●		●		●		●		●		●		●		●
2			●	●			●	●			●	●			●	●
4					●	●	●	●					●	●	●	●
8									●	●	●	●	●	●	●	●

C - Complement code. 10 and 16 positions.

BDC Complement

CODE	Position									
	0	1	2	3	4	5	6	7	8	9
1	●		●		●		●		●	
2	●	●			●	●			●	●
4	●	●	●	●					●	●
8	●	●	●	●	●	●	●	●		

Hexadecimal Complement

CODE	Position															
	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
1	●		●		●		●		●		●		●		●	
2	●	●			●	●			●	●			●	●		
4	●	●	●	●					●	●	●	●				
8	●	●	●	●	●	●	●	●								

G - Gray code. 10 and 16 positions.

BDC Gray

CODE	Position									
	0	1	2	3	4	5	6	7	8	9
1		●	●			●	●			●
2			●	●	●	●				
4					●	●	●	●	●	●
8									●	●

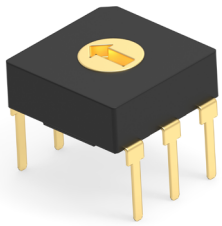
Hexadecimal Gray

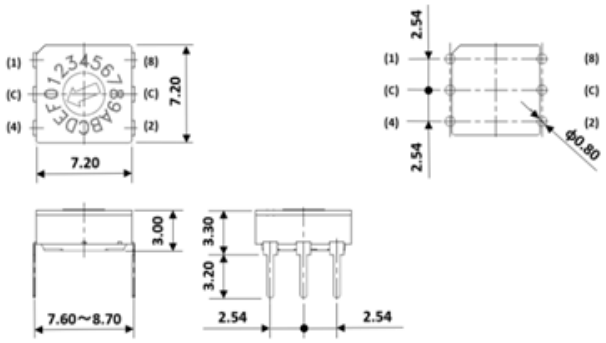
CODE	Position															
	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
1		●	●			●	●			●	●			●	●	
2			●	●	●	●					●	●	●	●		
4					●	●	●	●	●	●	●	●				
8									●	●	●	●	●	●	●	●

MRSS - Miniature rotary switch series

Terminal

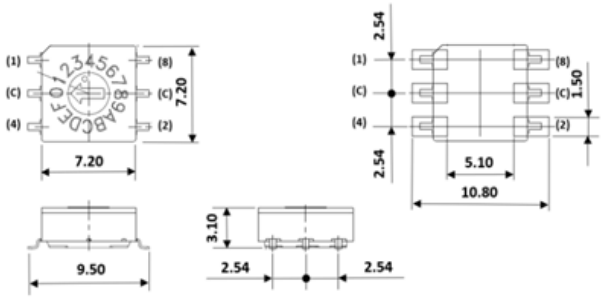
TH - Vertical, through hole TH (Hexadecimal)



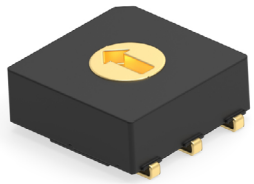


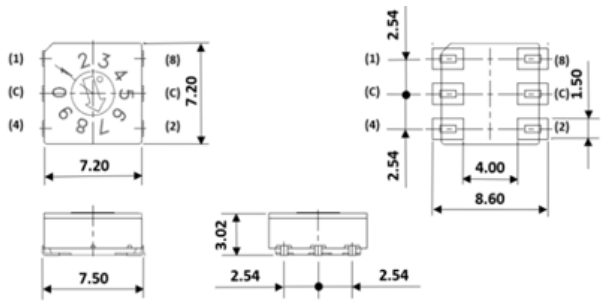
SMGW - Vertical, gullwing SM (Hexadecimal)



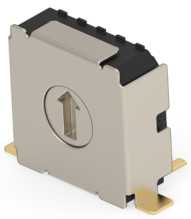


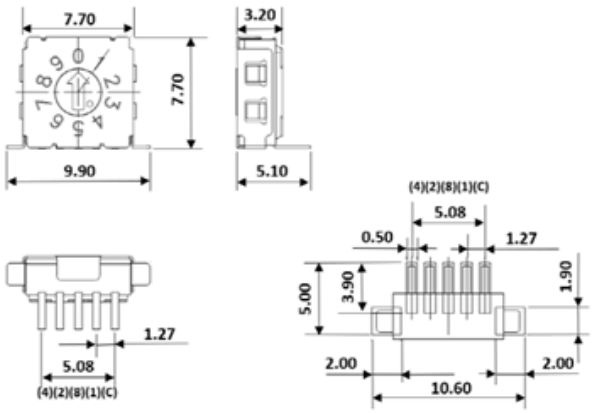
SMJ - Vertical, J-Lead SM (Binary)





SMGW - Horizonal, gullwing SM (Binary)





ORDERING INFORMATION

Part Number

MRSS - __ __ __ __ __ __ __ __

Actuator Orientation

V	Vertical
H	Horizontal

Configuration/Pitch/Colour Cover or Bracket/Marking

0	DIP/2.54/Gray/LASER
1	DIP/2.54/Black/Printed
4	SIP/1.27/Stainless Steel/LASER

Actuator Type

D	Screw driver slot, Flush

Code

C	Complement
G	Gray
R	Real

Packaging

T	Tube
TR	Tape and reel

Solder Terminal Configuration

J	J-Lead
GW	Gullwing
Blank	Through Hole

Termination Type

SM	Surface Mount
TH	Through Hole

Position

10
16

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06/23 ED

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