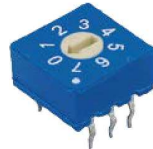


DRG Series

10X10 SIZE SEALED CONSTRUCTION ROTARY TYPE



SMT type



Through hole type



Shaft type



Flat type



Right angle type

FEATURES

- Molded-in terminals and fully sealed construction
- All plastics are UL 94V-0 grade fire retardant
- Reliable contact and long-term stability
- Binary decimal (8 or 10 positions) and hexadecimal (16 positions), real and complementary codes available
- Pin-out is compatible with most of current equivalents
- Gold plated contact to ensure low contact resistance
- RoHS Compliant

APPLICATIONS

- Address switching applications
- Data storage devices
- Computer and peripherals
- Instrumentation

SPECIFICATIONS

1. ELECTRICAL

Contact rating	
switching	25 mA, 24 VDC
non-switching	100 mA
Contact resistance (Initial)	100 mΩ Max.
Insulation resistance	1,000 MΩ Min. at 100 VDC
Dielectric strength	250 VAC Min. for 60 seconds

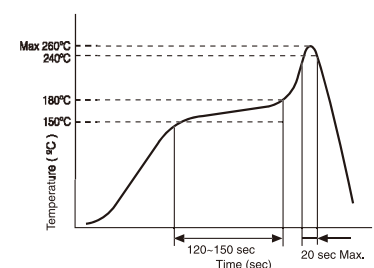
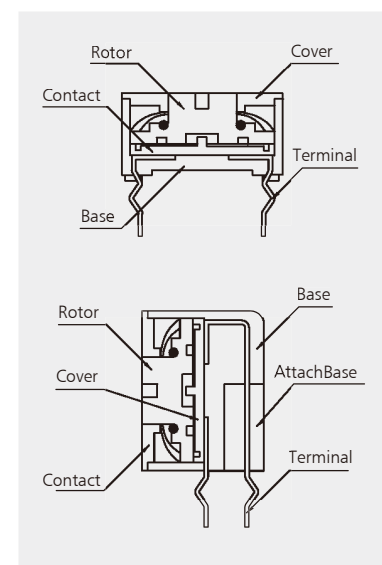
2. MECHANICAL and ENVIRONMENTAL

Temperature rating	
operating	-40°C to +85°C
storage	-40°C to +85°C
Operation force	500 gf-cm Max.
Mechanical life	10,000 steps
Vibration	10 Hz - 50 Hz - 10 Hz for 6 Hrs
Solderability	After flux 245±5°C for 5±1 seconds
(for through hole type)	
Resistance to soldering heat	260±5°C for 5±1 seconds
(for through hole type)	

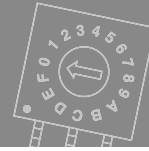
3. SOLDERING PROCESS

Reflow soldering heat for SMT type (reference only)	Reflow conditions: 240°C ,20 seconds or less, peak temperature 260°C or less
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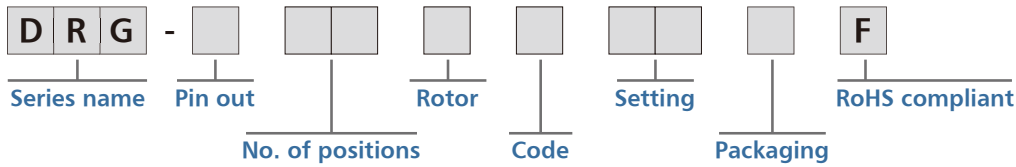
CONSTRUCTION



SWITCH ROTARY SWITCH



PART NUMBERING SYSTEM



Series name	Pin out	No. of positions	Rotor	Code
D R G Rotary Type Sealed Construction	3 3:3 4 1:4	0 8 8 positions 1 0 10 positions 1 6 16 positions	E Shaft type L Flat type	R Real C Complement A Real / Cross shaped slot type B Complement / Cross shaped slot type

Setting	Packaging
 Standard type (Top Adjust type)	 Tube packaging
R Right Angle type with Row Spacing 2.54 mm (Side Adjust Type)	C Tape & Reel Packaging (For surface mounting type only)
R 5 Right Angle type with Row Spacing 5.08 mm (Side Adjust Type)	
M Surface mounting type with Top Tape Sealed	

CODE

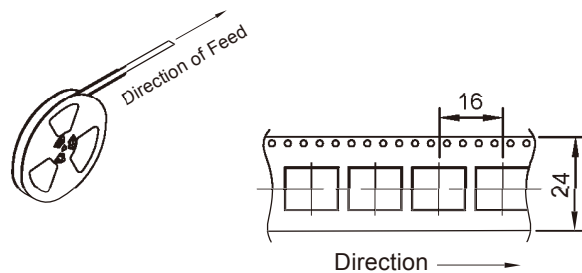
PIN NO.	POSITION															
	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
1	○	●	○	●	○	●	○	●	○	●	○	●	○	●	○	●
2	○	○	●	●	○	○	●	●	○	○	●	●	○	○	●	●
4	○	○	○	○	●	●	○	○	○	○	○	○	○	○	○	○
8	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

● — Real Code
 Rotor color : White (3 : 3)
 Yellow (1 : 4)

○ — Complement Code
 Rotor color : Red (3 : 3)
 Orange (1 : 4)

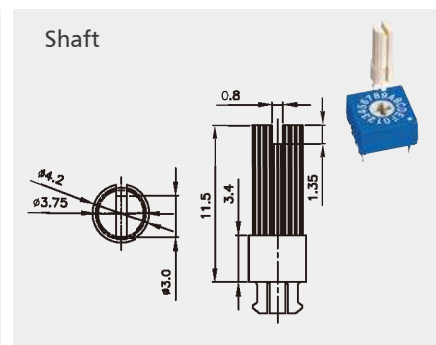
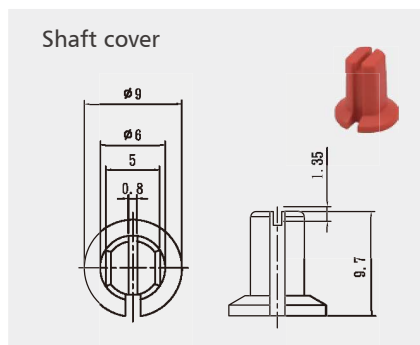
PACKAGING

- Tape & Reel Packaging (Per EIA STANDARD)
 Each Reel contains 700pcs switches with a 390mm minimum leader and a 160mm minimum trailer



OPTIONS

- Special marking available
- Shaft cover
 - 118-80100F (White 3:3)
 - 118-80200F (Red 3:3)
 - 118-80300F (Yellow 1:4)
 - 118-80400F (Orange 1:4)
- Shaft (For Cross Shaped Slot Type only)
 - 118-90100F (White 3:3)
 - 118-90200F (Red 3:3)



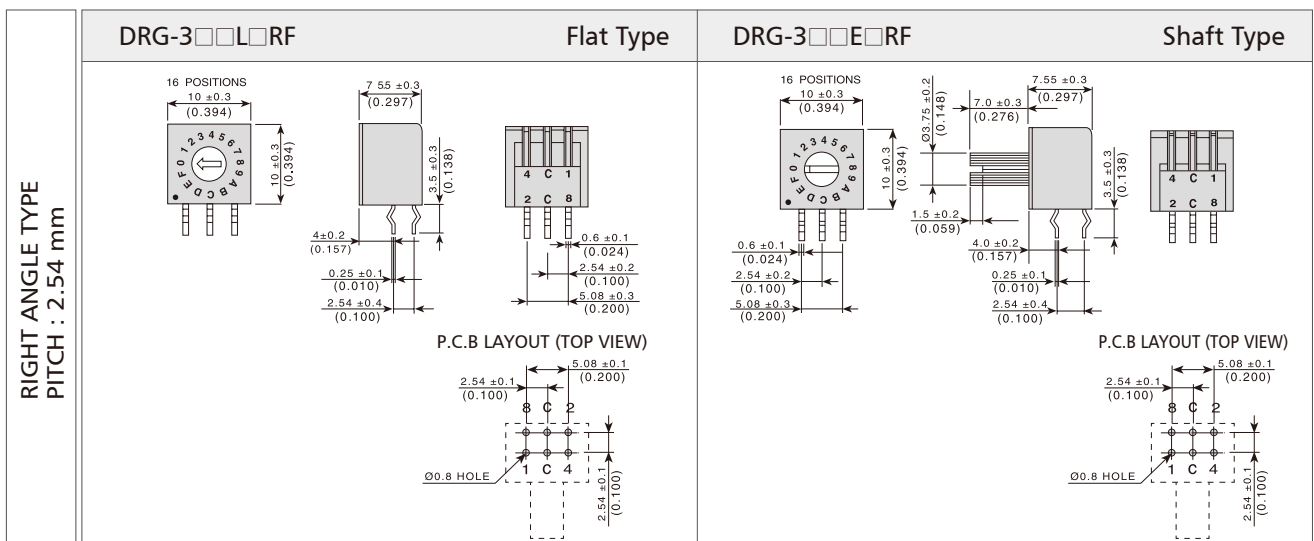
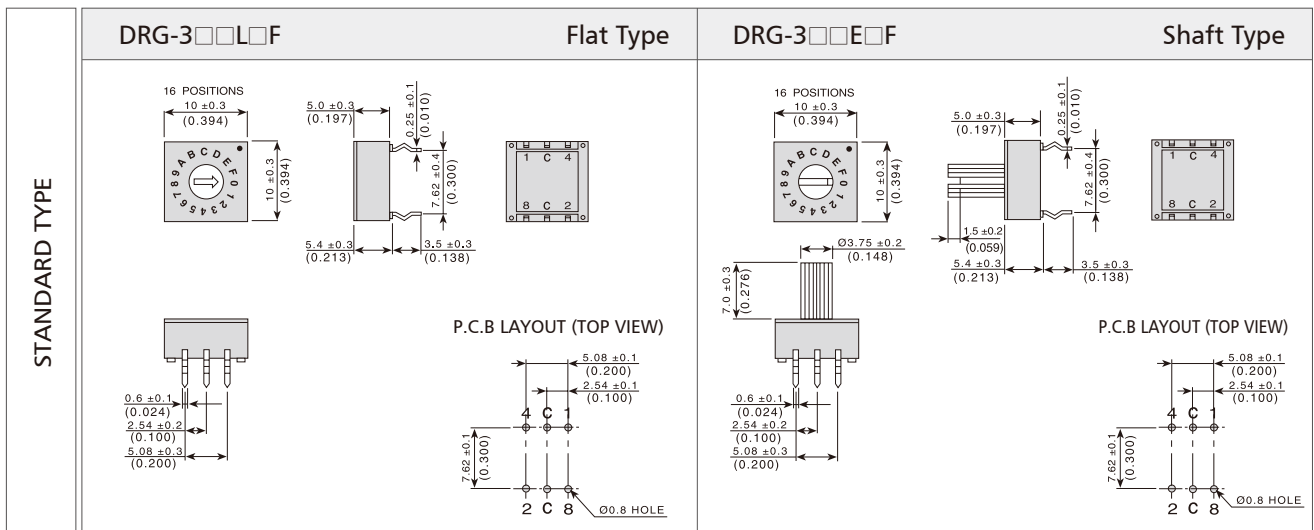
QUICK SELECTION GUIDE

SIZE	PIN OUT	POSITIONS	ROTOR	CODE	TYPE	PART NUMBER
10x10	3 : 3	8, 10, 16	FLAT, SHAFT	REAL , COMPLEMENT	STANDARD	DRG-3□□□LF, DRG-3□□□EF
					RIGHT ANGLE	DRG-3□□□LRF/R5F, DRG-3□□□ERF/R5F
					SMT	DRG-3□□□LMF
					SMT IN T&R	DRG-3□□□LMCF
	1 : 4		STANDARD		DRG-4□□□LF, DRG-4□□□EF	
			RIGHT ANGLE		DRG-4□□□LRF/R5F, DRG-4□□□ERF/R5F	
			SMT		DRG-4□□□LMF	
			SMT IN T&R		DRG-4□□□LMCF	

DIMENSIONS & CIRCUITRY

Unit mm (inch)

PIN OUT 3 : 3

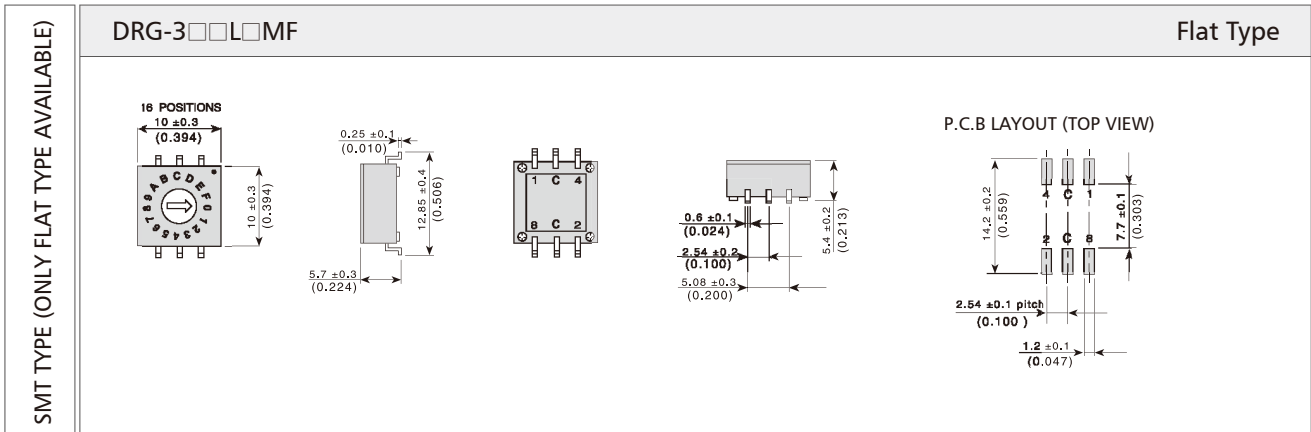
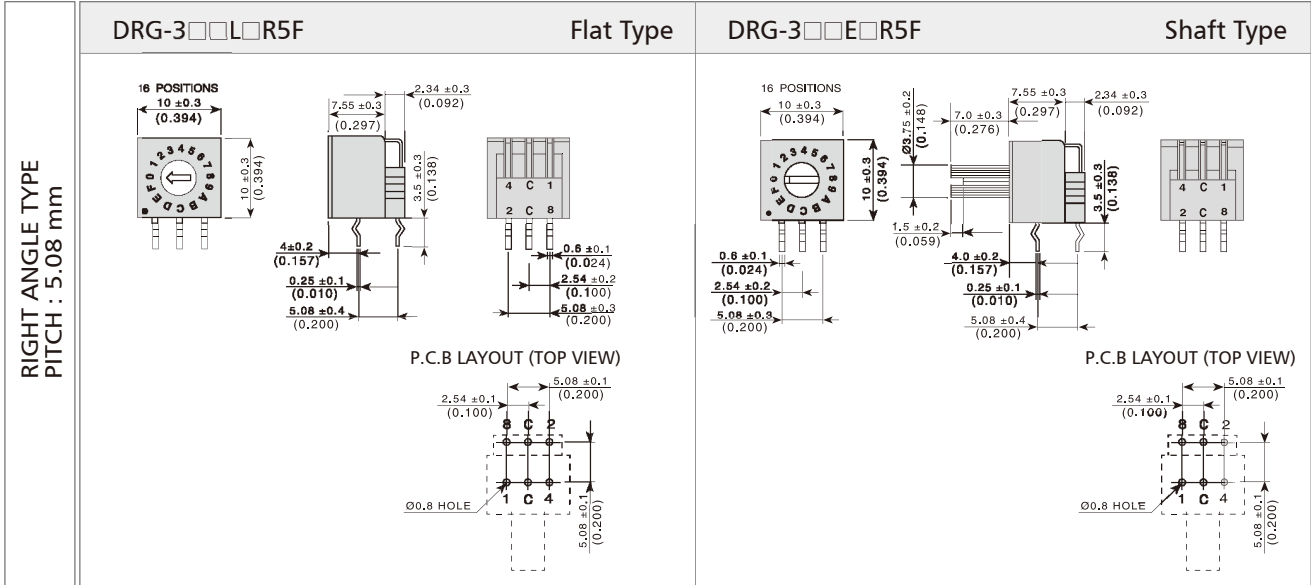


ROTARY SWITCH

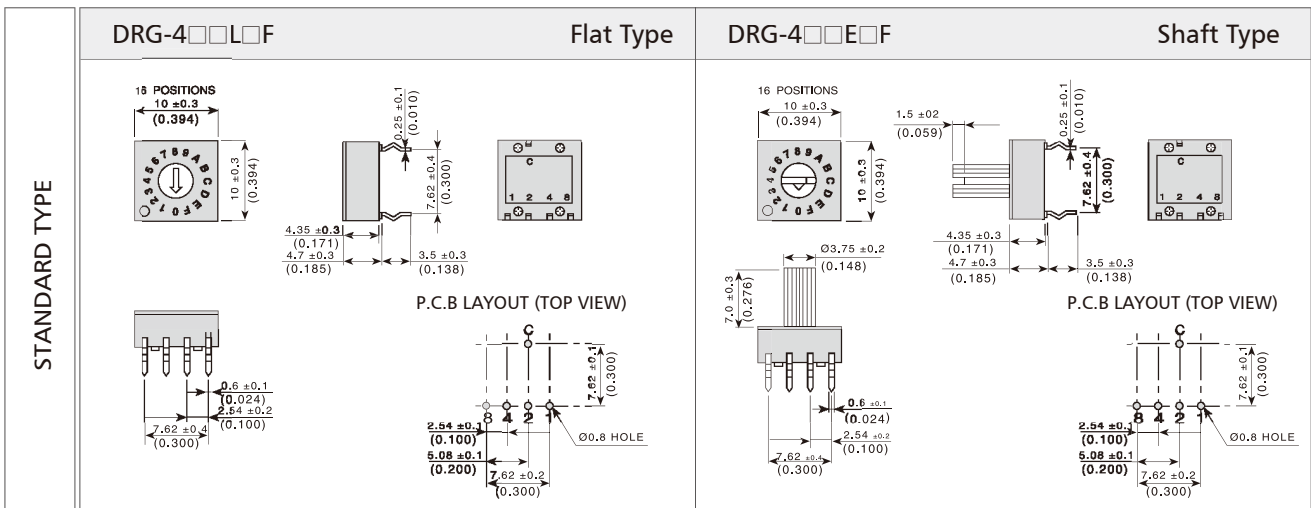
DIMENSIONS & CIRCUITRY

Unit mm (inch)

PIN OUT 3 : 3



PIN OUT 1 : 4



DIMENSIONS & CIRCUITRY

Unit mm (inch)

PIN OUT 1 : 4

RIGHT ANGLE TYPE PITCH : 2.54 mm	<p>DRG-4□□L□RF Flat Type</p> <p>16 POSITIONS 10 ±0.3 (0.394) 10 ±0.3 (0.394) 6.9 ±0.3 (0.272) 3.5 ±0.3 (0.138) 0.25 ±0.1 (0.010) 2.54 ±0.4 (0.100) 0.6 ±0.1 (0.024) 2.54 ±0.2 (0.100) 5.08 ±0.3 (0.200) 7.62 ±0.4 (0.300) P.C.B LAYOUT (TOP VIEW) 7.62 ±0.2 (0.300) 5.08 ±0.1 (0.200) 2.54 ±0.1 (0.100) 2.54 ±0.1 (0.100) Ø0.8 HOLE</p>	<p>DRG-4□□E□RF Shaft Type</p> <p>16 POSITIONS 10 ±0.3 (0.394) 10 ±0.3 (0.394) 6.9 ±0.3 (0.272) 7.0 ±0.3 (0.276) 0.375 ±0.2 (0.148) 1.5 ±0.2 (0.059) 0.25 ±0.1 (0.010) 2.54 ±0.4 (0.100) 3.5 ±0.3 (0.138) 0.6 ±0.1 (0.024) 2.54 ±0.2 (0.100) 5.08 ±0.3 (0.200) 7.62 ±0.4 (0.300) P.C.B LAYOUT (TOP VIEW) 7.62 ±0.2 (0.300) 5.08 ±0.1 (0.200) 2.54 ±0.1 (0.100) 2.54 ±0.1 (0.100) Ø0.8 HOLE</p>
	<p>DRG-4□□L□R5F Flat Type</p> <p>16 POSITIONS 10 ±0.3 (0.394) 10 ±0.3 (0.394) 6.9 ±0.3 (0.272) 2.34 ±0.3 (0.092) 3.5 ±0.3 (0.138) 0.25 ±0.1 (0.010) 5.08 ±0.4 (0.200) 0.6 ±0.1 (0.024) 2.54 ±0.2 (0.100) 5.08 ±0.3 (0.200) 7.62 ±0.4 (0.300) P.C.B LAYOUT (TOP VIEW) 7.62 ±0.2 (0.300) 5.08 ±0.1 (0.200) 2.54 ±0.1 (0.100) 5.08 ±0.1 (0.200) Ø0.8 HOLE</p>	<p>DRG-4□□E□R5F Shaft Type</p> <p>16 POSITIONS 10 ±0.3 (0.394) 10 ±0.3 (0.394) 6.9 ±0.3 (0.272) 2.34 ±0.3 (0.092) 0.375 ±0.2 (0.148) 1.5 ±0.2 (0.059) 0.25 ±0.1 (0.010) 5.08 ±0.4 (0.200) 3.5 ±0.3 (0.138) 0.6 ±0.1 (0.024) 2.54 ±0.2 (0.100) 5.08 ±0.3 (0.200) 7.62 ±0.4 (0.300) P.C.B LAYOUT (TOP VIEW) 7.62 ±0.2 (0.300) 5.08 ±0.1 (0.200) 2.54 ±0.1 (0.100) 5.08 ±0.1 (0.200) Ø0.8 HOLE</p>
SMT TYPE (ONLY FLAT TYPE AVAILABLE)	<p>DRG-4□□L□MF Flat Type</p> <p>16 POSITIONS 10 ±0.3 (0.394) 10 ±0.3 (0.394) 0.25 ±0.1 (0.010) 12.85 ±0.4 (0.506) 5.0 ±0.3 (0.197) 4.7 ±0.2 (0.185) 0.6 ±0.1 (0.024) 2.54 ±0.2 (0.100) 5.08 ±0.3 (0.200) 7.62 ±0.4 (0.300) P.C.B LAYOUT (TOP VIEW) 2.54 ±0.1 pitch (0.100) 7.7 ±0.1 (0.303) 14.2 ±0.2 (0.559) 1.2 ±0.1 (0.047)</p>	