

SERIES: TS16 | **DESCRIPTION:** TACTILE SWITCH**FEATURES**

- black and red actuator options
- surface mount
- 7.5~9.5 mm actuator

**SPECIFICATIONS**

parameter	conditions/description	min	typ	max	units
rated voltage		1		12	Vdc
rated current		0.01		50	mA
withstanding voltage	for 1 minute		250		Vac
contact resistance	applying load of 2 times operating force at 5 Vdc, 10 mA			100	mΩ
insulation resistance	at 100 Vdc for 1 minute	100			MΩ
operating force	see force table				
actuator travel		0.25	0.35	0.45	mm
operating temperature		-30		80	°C
storage temperature		-40		90	°C
life	rated load, 2 cycles/second, 1.5 times operating force				
	100 gf models		100,000		cycles
	160 gf models		80,000		cycles
	260 gf models		60,000		cycles
vibration	10~55~10 Hz, 1.5 mm amplitude, 2 hours on each XYZ				
flammability rating	see material table				
RoHS	yes				

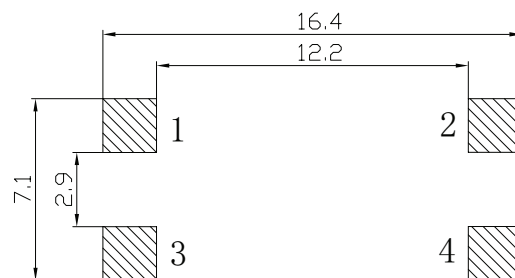
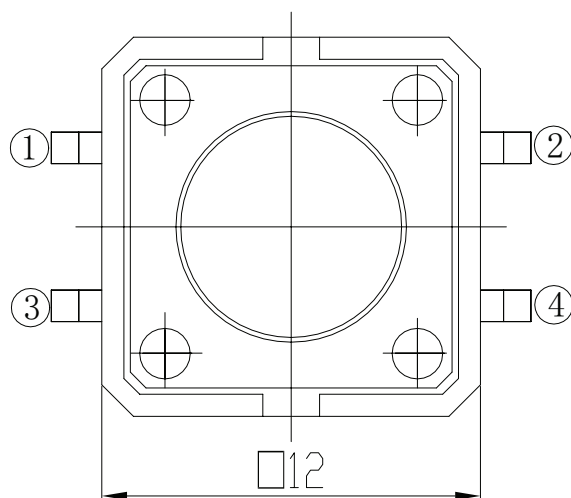
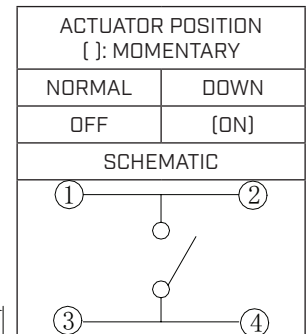
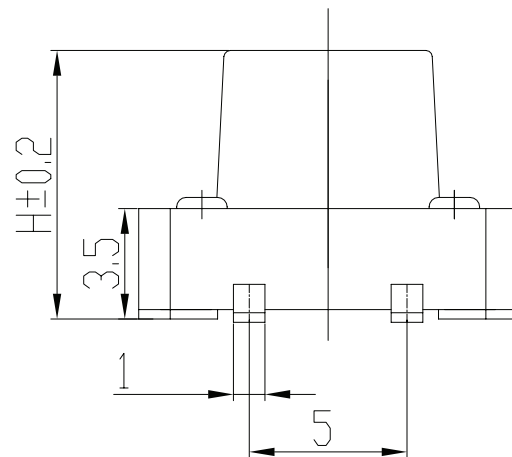
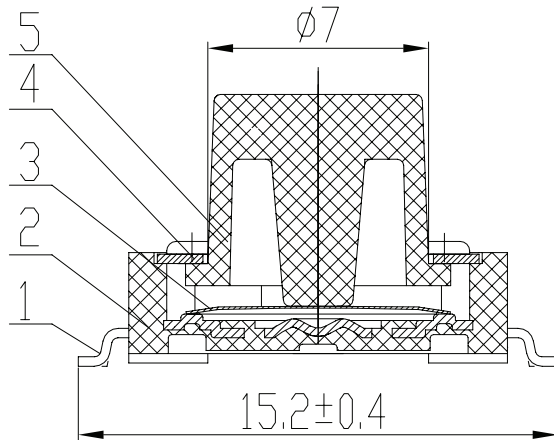
PART NUMBER KEY

TS16 - 1212 - XX - XX - XXX - SMT - TR			
Base Number	Actuator Height: 75 = 7.5 mm 85 = 8.5 mm 95 = 9.5 mm	Actuator Color: R = red BK = black	Push Force: 100 = 100 gf 160 = 160 gf 260 = 260 gf

MECHANICAL DRAWING

units: mm
tolerance: ± 0.2 mm
unless otherwise noted

ITEM	DESCRIPTION	MATERIAL	PLATING/COLOR
1	terminals	brass	silver
2	housing	FR52 [UL94V-0]	black
3	contacts	phosphor bronze	silver
4	cover	stainless steel	
5	stem	FR52 [UL94V-0]	



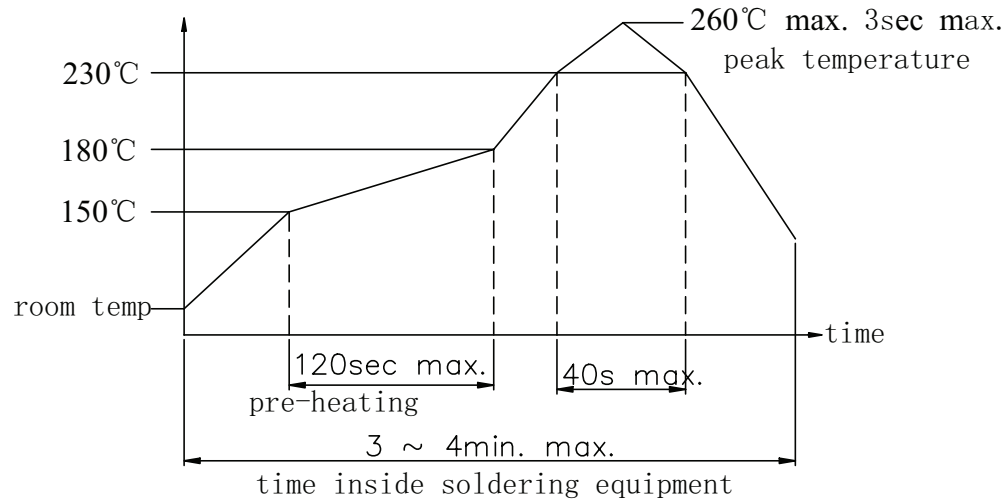
Recommended PCB Layout
Top View

Operating Force Table		
Model	Press Force [gf]	Return Force [gf]
100	100 $\pm$ 30	>20
160	160 $\pm$ 50	>20
260	260 $\pm$ 50	>20

SOLDERABILITY

parameter	conditions/description	min	typ	max	units
hand soldering	for maximum 3 seconds			350	°C
reflow soldering ¹	see reflow profile			260	°C

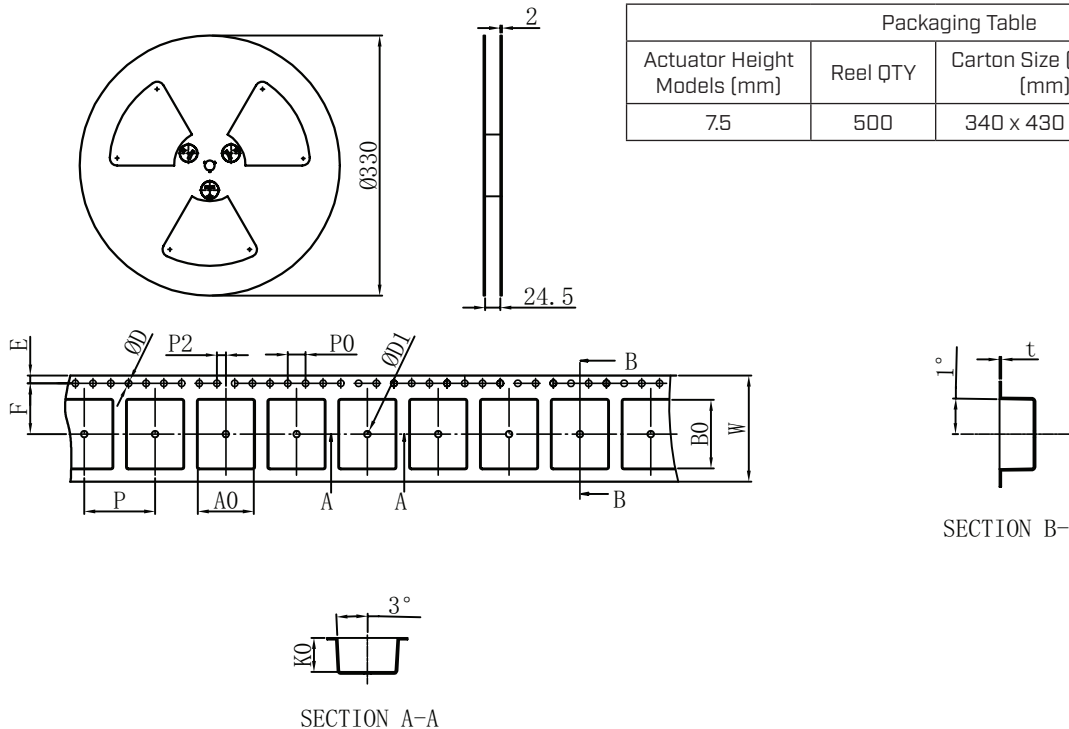
Notes: 1. Do not exceed 2 reflow cycles.



PACKAGING (7.5 HEIGHT MODEL)

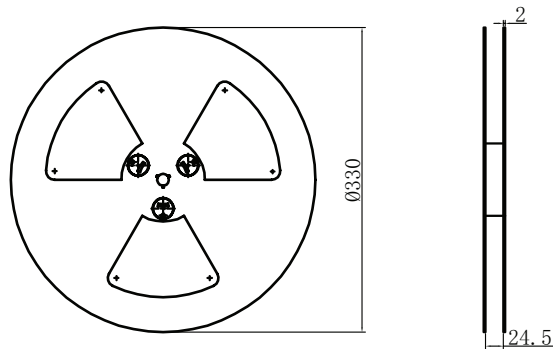
Item	W	A0	B0	K0	P
DIM[mm]	24.0 ^{+0.30/-0.10}	12.2 ^{+0.10/-0.10}	15.5 ^{+0.10/-0.10}	7.7 ^{+0.10/-0.10}	16.0 ^{+0.10/-0.10}
Item	F	E	D	D1	P0
DIM[mm]	11.5 ^{+0.10/-0.10}	1.75 ^{+0.10/-0.10}	1.50 ^{+0.10/-0.0}	1.50 ^{+0.10/-0.0}	4.0 ^{+0.10/-0.10}
Item	P2	t	--	--	--
DIM[mm]	2.0 ^{+0.10/-0.10}	0.4 ^{+0.05/-0.05}	--	--	--

Packaging Table			
Actuator Height Models (mm)	Reel QTY	Carton Size [XxYxZ] (mm)	Carton QTY
7.5	500	340 x 430 x 340	7,000

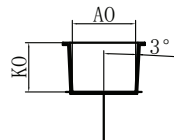
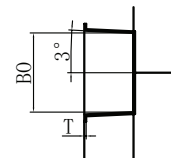
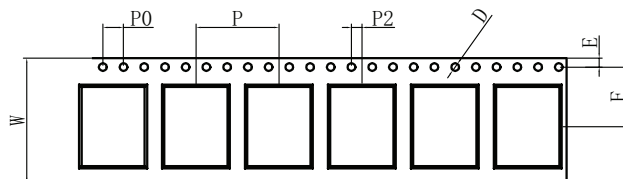


PACKAGING (8.5 & 9.5 HEIGHT MODELS)

Item	W	A0	B0	K0	P
DIM(mm)	24.0 ^{+0.30/-0.30}	12.3 ^{+0.10/-0.10}	15.6 ^{+0.10/-0.10}	9.5 ^{+0.10/-0.10}	16.0 ^{+0.10/-0.10}
Item	F	E	D	P0	P2
DIM(mm)	11.5 ^{+0.10/-0.10}	1.75 ^{+0.10/-0.10}	1.50 ^{+0.10/-0.10}	4.0 ^{+0.10/-0.10}	2.0 ^{+0.10/-0.10}
Item	t	--	--	--	--
DIM(mm)	0.4 ^{+0.05/-0.05}	--	--	--	--



Packaging Table			
Actuator Height Models (mm)	Reel QTY	Carton Size (XxYxZ) (mm)	Carton QTY
8.5~ 9.5	400	340 x 430 x 340	5,600



REVISION HISTORY

rev.	description	date
1.0	initial release	04/13/2022
1.01	logo, datasheet style update	08/05/2022

The revision history provided is for informational purposes only and is believed to be accurate.



CUI Devices offers a one (1) year limited warranty. Complete warranty information is listed on our website.

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