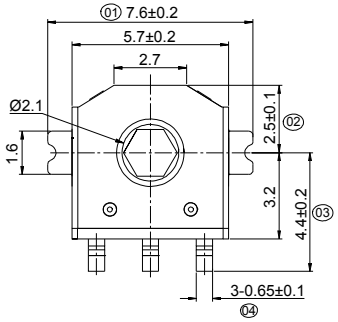
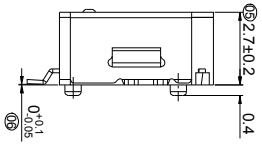
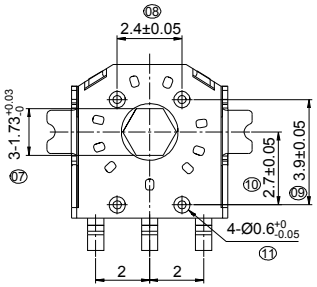
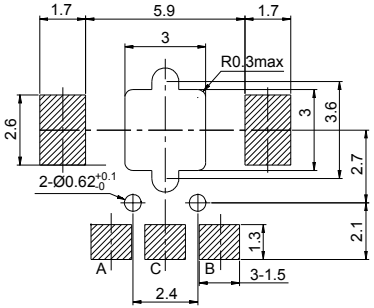
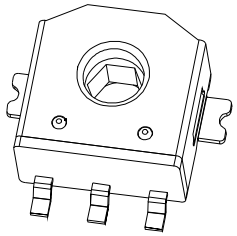








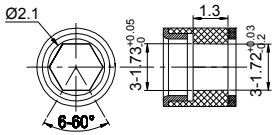
Circuit Board Welding Diagram

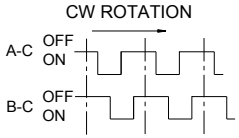


Material list

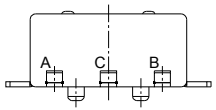
Items	Name	Material
1	Cover	Copper Alloy
2	Ancho Plate	Stainless Steel Strips
3	Wheel gear	Engineering plastics
4	Base	Engineering plastics
5	Contact Spring	Copper Alloy
6	Terminal	Copper Alloy

Shaft hole Diagram





12 pulse 12 click



No	Items		Standard	No	Items	Standard
1(1.2)	Operating Temperature Range		-40°C to +85°C	19(7.1)	Mechanical Life	
2(1.3)	Operating Relative Humidity		≤85% RH	20(7.2)	Electronics Life	100,000 cycles(30 t/min,Torque attenuation<30%)
3(3)	Ratings		DC 5V 0.5mA	21(8.1)	Cold Proof	-40±2°C 96h
4(4.1)	Contact Resistance		200mΩ Max(Initial status)	22(8.2)	Hot Proof	85±2°C 96h
5(4.2)	Insulation Resistance		50MΩ Min	23(8.3)	Moisture Resistance	40±2°C 96h，90-95%RH 96h
6(4.3)	Dielectric Voltage		AC50V,60s	24(8.4)	Temperature Cycling	-40~85°c，change 5 cycles
7(4.4)	Output Signal Format	C.W.	12pulse/360°,A(A~C),B(B~C)	25(8.5)	Salt Mist	
		C.C.W	12pulse/360°,B(B~C),A(A~C)	26(8.6)	Vulcanization test	
8(4.4)	Phase-Different		T1,T2,T3,T4≥4mS	Dimension		
9(4.5)	Chattering		t1,t3≤3mS	1	Solder Foot Width	7.6±0.2
10(4.5)	Bounce		t2≤2mS	2	Top height	2.5±0.1
11(5.1)	Detent Points		12detent points,each angle:30°±3°	3	Tip dimensions of pin foot	4.4±0.2
12(5.3)	Rotational Force		15±10gf.cm(initial status)	4	Width of Pin	3-0.65±0.1
13(5.4)	Tooth Intensity Value		/	5	Body thicknes	2.7±0.2
14(5.4)	Tooth Sense Consistency		/	6	Flatness	0+0.1 -0.05
15(5.5)	Axial Swing Strength		1N,60S	7	Square Hole Size	1.73+0.05 -0
16(5.6)	Terminal Strength		1N,60S	8	Distance of column	2.4±0.1
17(6.2)	Solder Heat Resistance	SMT Soldering	250°C Max 3S Max，230°C Min 40S Max	9	Distance of column	3.9±0.1
		Manual Soldering	350°C Max，3S Max	10	Distance of hole to column	2.7±0.1
18(6.1)	Solder Ability		250°C Max，3S Max	11	Column Size	Ø0.6+0 -0.05

Process Capable

RoHS Compliant 2002/95/EC

HALOGEN Compliant Halogen Free

品赞科技 G-Switch ®

G-Switch Electronic (HongKong) CO.,Ltd.

Unless otherwise specified, Tolerance:

X.	±0.30
X.x	±0.20
X.xx	±0.15
X.xxx	±0.10
Angles	±3°

DESIGN Yvette Chen	DATE 2016.05.29	Molde code:	
CHECKED	DATE	E6E8-2.7C5-12B15 有齿感	
APPROVED	DATE		
http://www.dg-switch.com		REV.: X1	SCALE: 4:1	UNIT: mm
TEL:0769-82388879		SIZE: A4	SHEET: 1/1