

1. Material

See table.

2. Electrical

A. Impedance: 50Ω

B. Frequency range: DC to 6 GHz

C. Return Loss:

 ≥ 26 dB, DC to 1 GHzD. Insertion Loss: -0.3 db max (DC to 2 GHz)E. Insulation resistance: $\geq 1 \times 10^3$ m Ω F. Center contact resistance: ≤ 5 m Ω G. Outer contact resistance: ≤ 5 m Ω

H. Test voltage (at sea level): 750V rms

I. Working voltage (at sea level): 335V rms

J. Power current: ≤ 1 ADC

Mechanical data

A. Mating cycles: ≥ 25 B. Engagement force: ≤ 25 NC. Disengagement force: ≥ 2 ND. Retention force latch: ≥ 110 NE. Coding efficiency: ≥ 40 N

Ordering Information

FKR3690R-FX-04-G

1 2 3 4 5

1: Series No.

2: R:R/A Type

3: F:Female

4: Fool-proofing Type

A: A Type

B: B Type

C: C Type

D: D Type

E: E Type

F: F Type

G: G Type

H: H Type

I: I Type

K: K Type

L: L Type

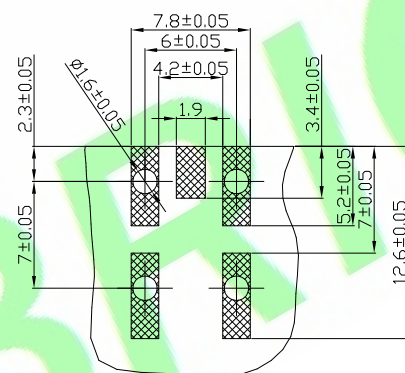
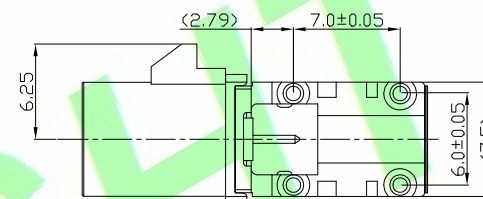
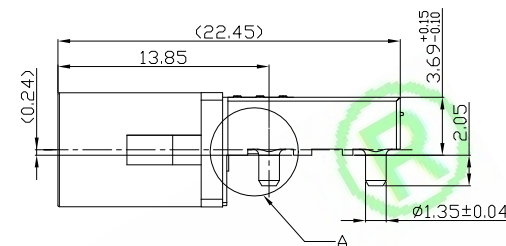
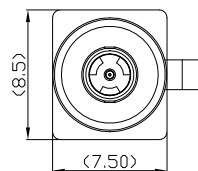
M: M Type

N: N Type

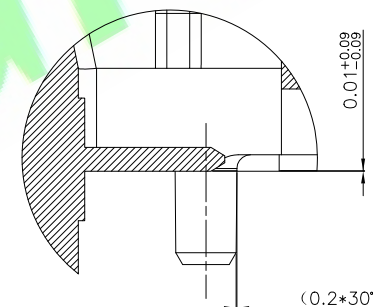
L: L Type

Z: Z Type

5: G: In Tape & reel



Recommended PCB LAYOUT



Partial view:A Ratio 6:1

NO	Part name	Number	Material	Plating/Color
1	Housing	1	HTN	See Table 1
2	Dielectric	1	HTN	See Table 1
3	Outer contact	1	Zinc alloy	Tin 2-5um over Nickel
4	Contact	1	Brass	Gold flash

DR.BY.: XIAO	GENERAL TOLERANCE:		PART NO : FKR3690R-FX-04-G	
CHKD.: Aren	LINEAR	ANGLES	BURY P/N:	
	X.: ± 0.40	X': $\pm 5.0^\circ$	TITLE : FAKRA LOW PROFILE Female CONNECTOR	
	X.X: ± 0.30	X.X': $\pm 3.0^\circ$		
APPD.: Billy	X.XX: ± 0.20	X.XX': $\pm 2.0^\circ$	DATE: 17-Oct-2025	
	X.XXX: ± 0.10	X.XXX': $\pm 1.0^\circ$		

HJBRIGHT® 东莞市華晶電子有限公司
BRIGHT-E ELECTRONIC TECHNOLOGY LIMITED

SHEET: 1/2

SCALE: 1:1

UNIT: mm



THIRD ANGLE PROJECTION

A4

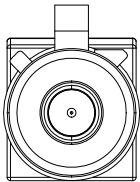
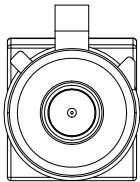
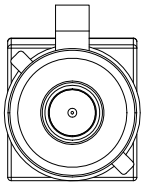
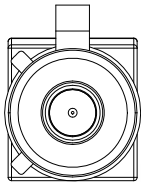
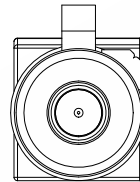
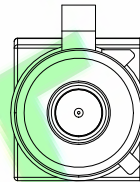
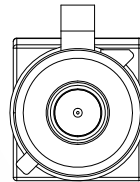
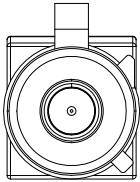
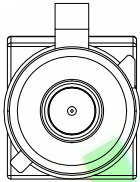
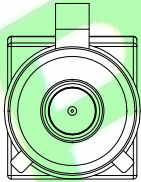
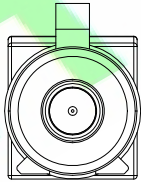
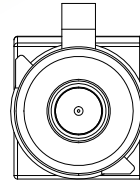
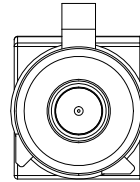
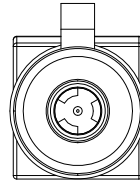
1X	ORIGINAL	XIAO	
REV	DESCRIPTION	DR.BY	ECN. NO

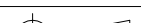
See Table 1:
Fool-proofing Type

RoHS Compliant



Automobile
Product

A Type	B Type	C Type	D Type	E Type	F Type	G Type
						
Black 9005	White 9001	Blue 5005	Claret Violet 4004	Green 6002	Brown 8011	Grey 7031
H Type	I Type	K Type	L Type	M Type	N Type	Z Type
						
Violet 4003	Beige 1001	Curry 1027	Carmine-red 3002	Pastel Orange 2003	Pastel Green 6019	Waterblue 5021

				DR.BY.: XIAO		GENERAL TOLERANCE:		PART NO : FKR3690R-FX-04-G		HJBRIGHT® 东莞市華晶電子有限公司 BRIGHT-E ELECTRONIC TECHNOLOGY LIMITED					
				CHKD.: Aren		LINEAR	ANGLES	BURY P/N:							
				APPD.: Billy		x.: ±0.40	x': ±5.0°	TITLE : FAKRA LOW PROFILE Female CONNECTOR							
						x.x: ±0.30	x.x': ±3.0°								
						x.xx: ±0.20	x.xx': ±2.0°								
1X		ORIGINAL		XIAO				DATE: 17-Oct-2025		SHEET: 2/2		 THIRD ANGLE PROJECTION A4			
REV.		DESCRIPTION		DR.BY		ECN. NO.				SCALE: 1:1					
										UNIT: mm					
1		2		3		4		5		6		7		8	