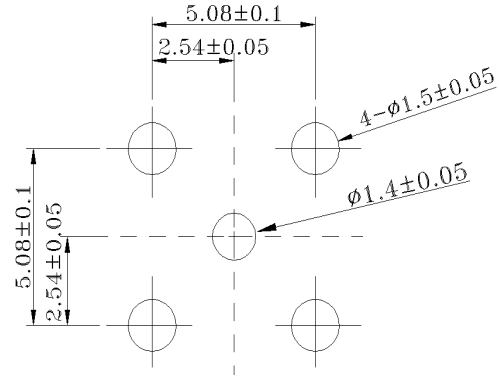
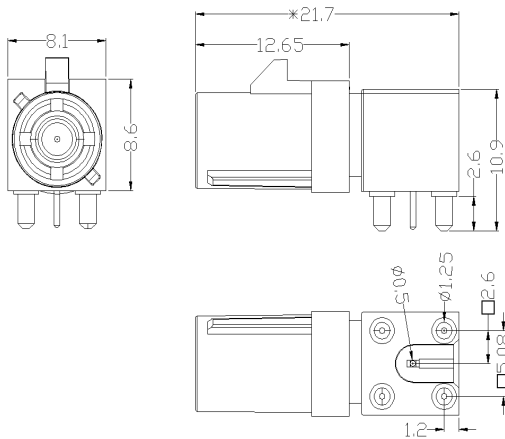


**Product specification**

**Drawing No. : KH-2FK1-I-RM-101**

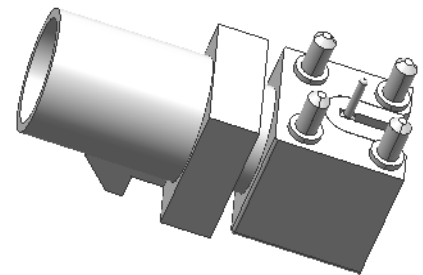
**Series description**

FAKRA connectors are designed to perform up to 6 GHz and meet the particular mechanical and environmental requirements of the automobile industry. This connector is designed to meet or exceed the requirement of specification for automotive RF connector systems. Interface is designed to meet DIN 72594-1 and automotive electrical & RF connector systems meet SAE/USCAR-2 & SAE/USCAR-17 performance specification.



**Electrical**

- |  |  |
|--|--|
| 1) Impedance                           | 50 $\Omega$ , Nominal  |
| 2) Frequency range                     | DC-6 GHz   |
| 3) VSWR(Return loss)                   | DC-2 GHz $\leq 1.4$ (15.56 dB)<br>2-3 GHz $\leq 1.5$ (13.98 dB)<br>3-6 GHz $\leq 1.6$ (12.74 dB) |
| 4) Dielectric withstanding voltage     | 800 VRMS, Min.   |
| 5) Insulation resistance               | $\geq 100$ M $\Omega$  |
| 6) Contact resistance                  |  |
| Original state                         | $\leq 10$ m $\Omega$   |
| After endurance or environmental tests | $\leq 40$ m $\Omega$   |



**Mechanical**

- |                            |                |
|----------------------------|----------------|
| 1) Outline dimensions      | Per Drawing    |
| 2) Durability              | 25 Cycles Min. |
| 3) Temperature range       | -40°C To 105°C |
| 4) Meet USCAR-2 & USCAR-17 |                |

**Material and finish**

Component description	Material	Finish
1) Housing	PBT	Per key code
2) Contact	Brass	Gold plating
3) Insulator	LCP	Natural
4) Body	Zinc alloy	Nickel plating

深圳市金航标电子有限公司	TITLE		DATE	2017-3-21
	FAKRA PCB R/A PLUG		CREATED	ERIC
ECO			CHECKED	FANCY
ECN	P/N	KH-2FK1-I-RM-101	APPROVED	JASON
DATE	SHEET	1 OF 2	REV.	

## Product specification

Drawing No. : KH-2FK1-I-RM-101

### Environmental







1) Temperature range	-40°C To 105°C	
2) Thermal shock	USCAR-17, Paragraph 4.5.1	-40°C To 85°C, 100 Cycles
3) Vibration & Mechanical shock	USCAR-2, Paragraph 5.4.6	Random, 5-10 ms, 35Gs, 1/2 sine
4) Temperature/Humidity cycling	USCAR-2, Paragraph 5.6.2	40 Cycles, 8 Hours/Cycle
5) Adaptability of connector to welding	reflow soldering	NO
	wave soldering	YES

### Other

2FK1-X-RM-101: "X" Show key code

Key code see: FK-PLUG-KCX

### Key code

KEY CODE	PART NO.	COLOR	RAL
 A	2FK1-A-RM-101	JET BLACK	9005
 B	2FK1-B-RM-101	CREAM WHITE	9001
 C	2FK1-C-RM-101	SIGNAL BLUE	5005
 D	2FK1-D-RM-101	CLARET VIOLET	4004
 E	2FK1-E-RM-101	LEAF GREEN	6002
 F	2FK1-F-RM-101	NUT BROWN	8011
 G	2FK1-G-RM-101	BLUE GREY	7031
 H	2FK1-H-RM-101	HEATHER VIOLET	4003
 I	2FK1-I-RM-101	BEIGE	1001
 K	2FK1-K-RM-101	CURRY	1027
 L	2FK1-L-RM-101	CARMINE RED	3002
 M	2FK1-M-RM-101	PASTEL ORANGE	2003
 N	2FK1-N-RM-101	PASTEL GREEN	6019
 Z	2FK1-Z-RM-101	WATER BLUE	5021

深圳市金航标电子有限公司		TITLE		DATE	2018-3-21
		FAKRA PCB R/A PLUG		CREATED	ERIC
ECO				CHECKED	FANCY
ECN		P/N	KH-2FK1-I-RM-101	APPROVED	JASON
DATE		SHEET	2 OF 2	REV.	