

FM TUNER FOR CAR AUDIO(DBM)
(Satisfied FTZ(CE Mark) Rules)**FEATURES**

- Upper Side Band Super Heterodyne System.
- Intermediate Frequency : 10.7MHz.
- ANT Input Impedance : 75Ω unbalance.
- IF Output Impedance : 300Ω unbalance.
- Receiving Frequency : 87.5~108MHz.
- Operation Tuning Voltage: 1.3~5.0V (Ta=25℃).

MAXIMUM RATING (Ta=25℃)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Supply Voltage	V _{CC}	10	V
Tuning Voltage	V _T	6	V
Operating Temperature Range	T _{opr}	-20~70	℃

TUNING VOLTAGE

Receiving Frequency [MHZ]	MIN.	TYP.	MAX.	UNIT	Receiving Frequency [MHZ]	MIN.	TYP.	MAX.	UNIT
87.5	1.3	1.40	-	V	98.0	-	2.80	-	V
88.0	-	1.55	-		100.0	-	3.10	-	
90.0	-	1.78	-		102.0	-	3.40	-	
92.0	-	2.10	-		104.0	-	3.80	-	
94.0	-	2.30	-		106.0	-	4.20	-	
96.0	-	2.50	-		108.0	-	4.70	5.0	

KCF209AV/AH

ELECTRICAL CHARACTERISTICS(Ta=25)

(Unless Otherwise Specified : V_{CC}=8.2V, f_i=98MHz, Δf=22.5kHz, f_m=1kHz, V_{AGC}=5V)

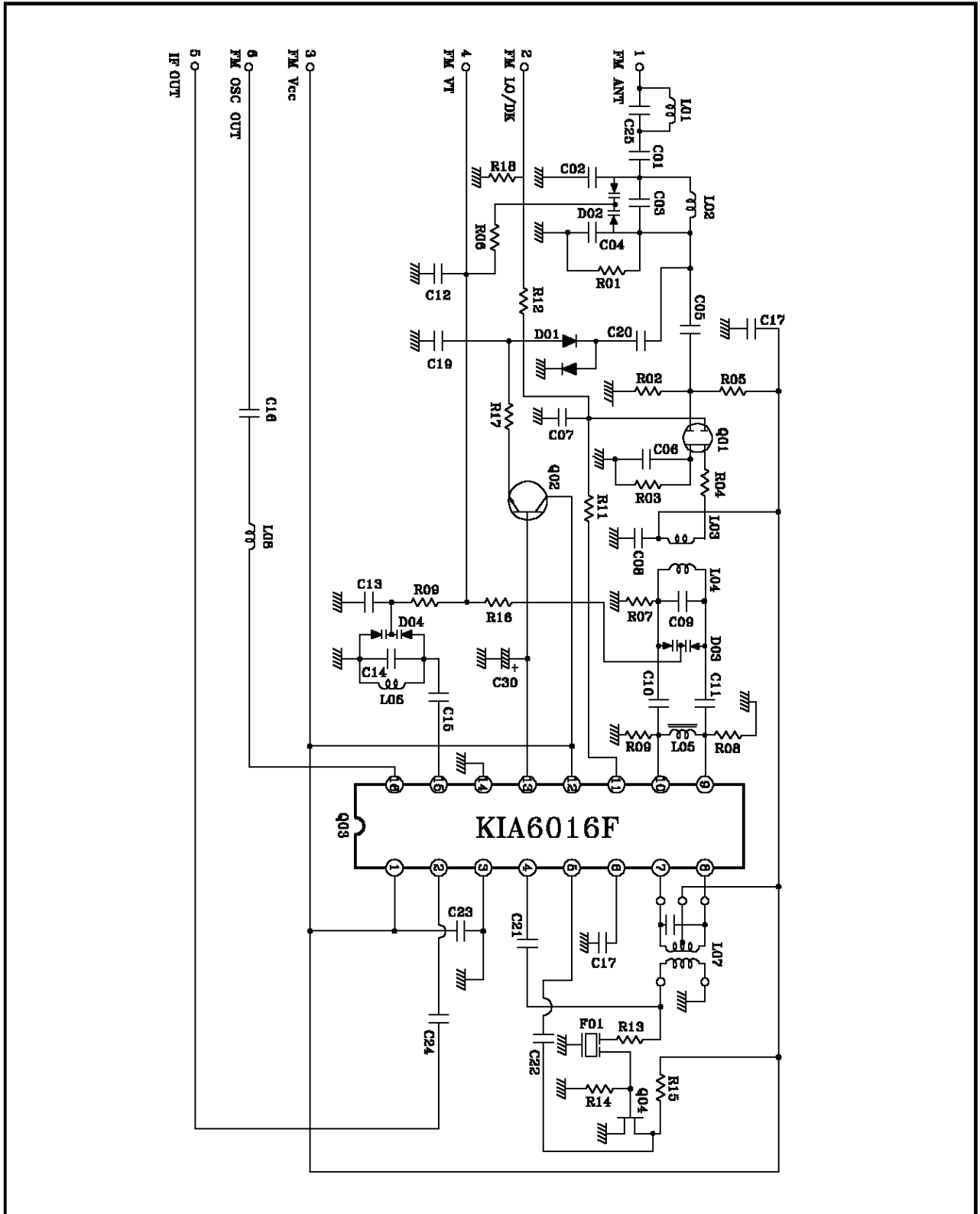
CHARACTERISTIC	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Power Gain	at 98MHz	45	49	53	dB
Gain Balance		-	2	6	dB
Noise Figure		-	6	9	dB
Image Rejection	at 106MHz	50	60	-	dB
IF Rejection		60	70	-	dB
1/2 IF Rejection		75	80	-	dB
2 X OSC Rejection		70	80	-	dB
AGC Reduction	5V→0V	14	20	26	dB
OSC Output Voltage	1kΩ Load(rms)	120	200	280	mV
IF Band Width	-3dB	140	180	220	kHz
Current Consumption		-	40	-	mA
OSC +B Stability	STD Voltage ±10%	-	±200	±250	kHz
OSC Frequency Drift Against Strong Signal Input	ANT Input Level 60dBμV→120dBμV	-	±5	±30	kHz
Spurious		Shall be Contented FCC, CE Rule			
OSC Temperature Drift	20±40℃	MAX. ±600			kHz
		MAX. ±6			dB
OSC Stop Voltage		MIN. 4.5			V

* Standard Testing Condition

1. Temperature Condition : 20±2℃
2. Relative Humidity Condition : 60±5%
3. Allowable Variation of Supply Voltage : ±0.1V(Max.)
4. Allowable Variation of Tuning Voltage : ±0.01V(Max.)

KCF209A/ AH

INTERNAL CIRCUIT



KCF209AV/AH

OUTLINE DIMENSIONS (Unit:mm)

