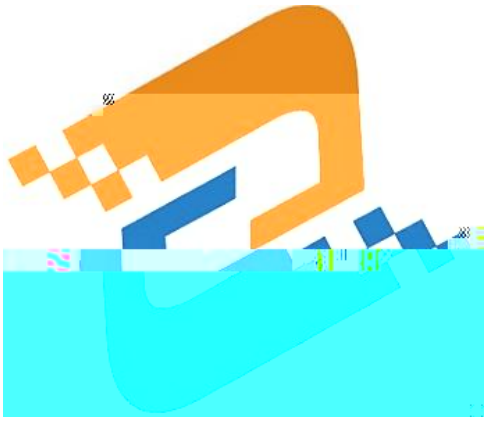


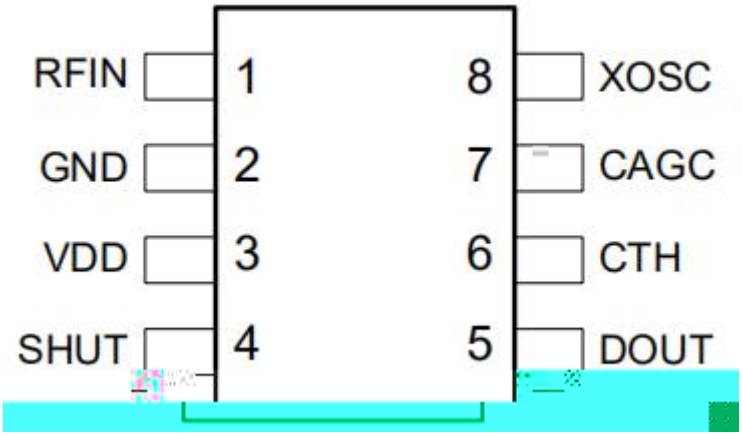
JZCR04

:V1.1

:2020-07

JZCR04

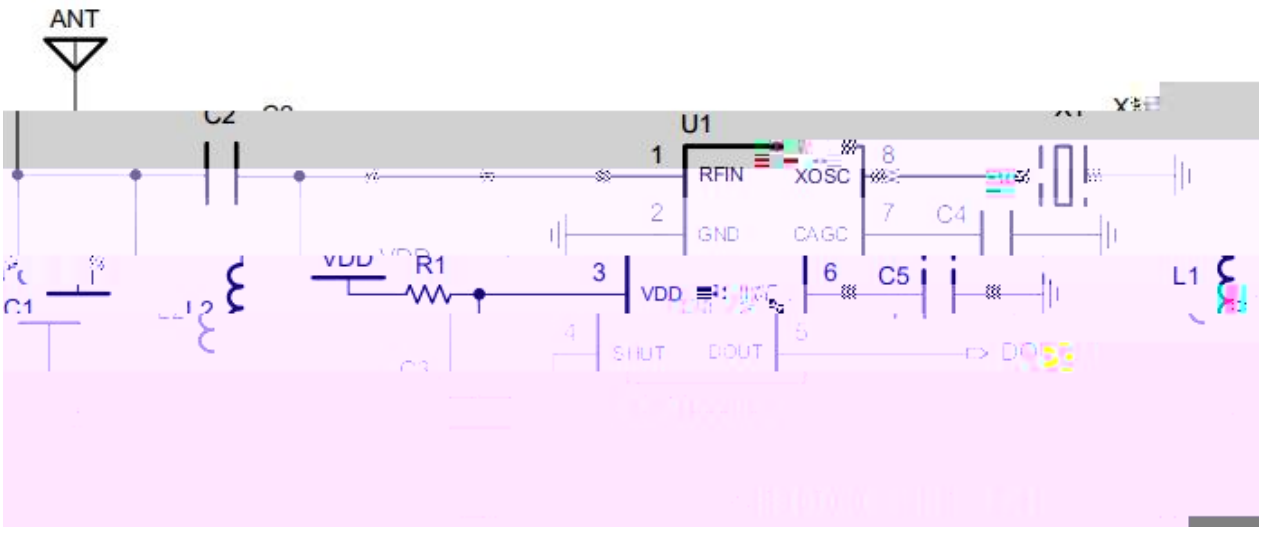
4.



1 JZCR04

		I/O	
1	RFIN	I	
2	GND	I	
3	VDD	I	3.0-5.5V
4	SHUT	I	
5	DOUT	O	
6	CTH	I	
7	CAGC	I	
8	XOSC	I	

5.



2 JZCR04 Bom

(AC) ,C4 = 4.7uF
(DC) ,C4 = 1uF

6.

V_{DD} = 5 V T_{OP} = 25 ° C F_{RF} = 433.92 MHz PN9 50Ω 0.1 BER

6.1

VDD		-40 +85	3.0	5	5.5	V
TA			-40		+85	
θ			1			mV/μs

6.2

V_{DD}		[1]		-0.3	5.5	V
V_{IN}				-0.3	V_{DD}+ 0.3	V
T_J				-40	125	
T_{STG}				-50	150	
T_{SDR}			30		255	
VHBM	ESD	[2]	HBM	-2	2	kV
		@85		-100	100	mA

6.3

:

[1]. CAGC

— CAGC 4.7 uF

70 ms

— CAGC 1 uF 8 ms

CAGC

6.4

	$F_{XTAL315}$	F_{RF} = 315 MHz	9.81563	MHz
	$F_{XTAL433.92}$	F_{RF} =433.92 MHz	13.52127	MHz
[1]			± 20	ppm
[2]	C_{LOAD}		15	pF
	Rm		60	
[3]	T_{XTAL}		400	µs

:

(1) (2) (3) (4)

7.

JZCR04 LNA + Mixer + IF-Filter +Limiter + PLL CAGC CTH

7.1

JZCR04 ± 20 ppm 60 Ω 15 pF

JZCR04 300 – 480 MHz 433.92 MHz 13.52127 MHz FRF FXTAL

FXTAL = 13.52127/433.92 *F_{RF}

JZCR04 315 MHz 9.81563 MHz

7.2

JZCR04 433.92 MHz 510 kHz BWRF

BW_{RF} = 1.175332e^{-3} F_{RF}

JZCR04 315 MHz 370 kHz

7.3 CAGC CTH

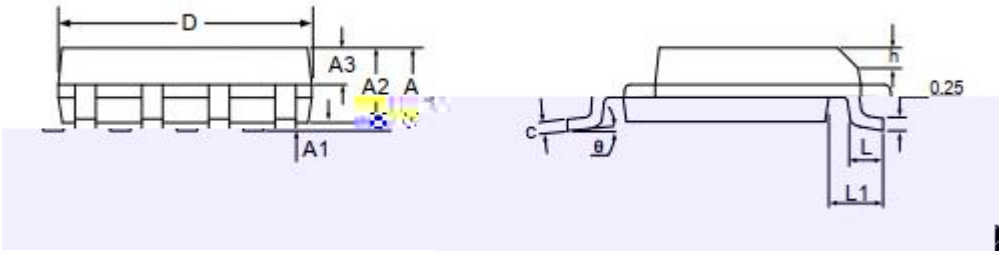
CAGC CAGC

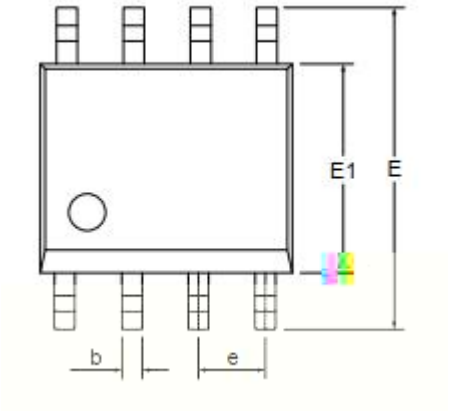
CAGC 1 uF

JZCR04 CTH 2

8.

JZCR04 SOP8 :





	mm)		
A	-	10	1.75
A1	0.10	3	0.225
A2	1.30	100	1.50
A3	0.60	100	0.70
b	0.39	470	0.48
c	0.21	36	0.26
D	4.70	36	5.10
E	5.80		6.20
E1	3.70		4.10
e	1.27 BSC		
h	0.25		0.50
L	0.50		0.80
L1	1.05 BSC		
θ	0	-	8 °