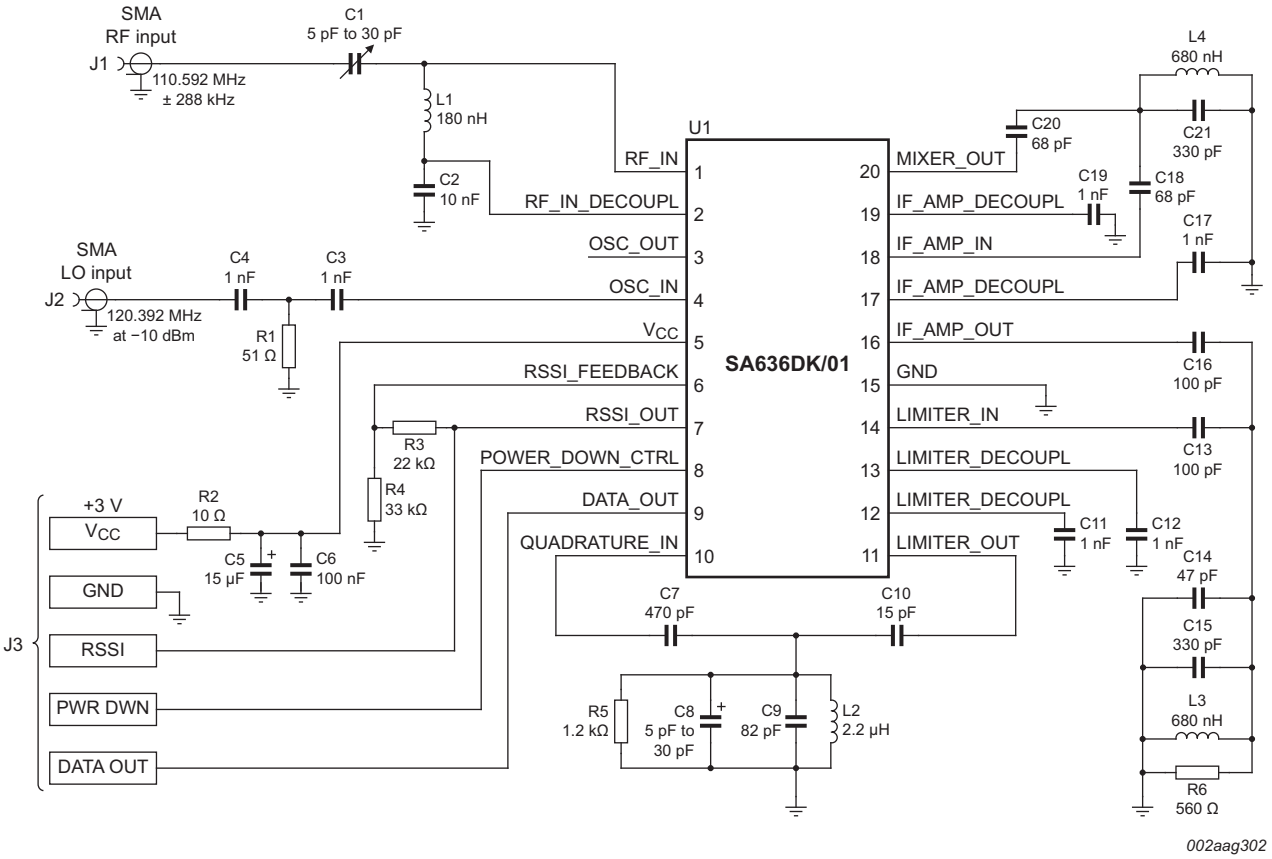
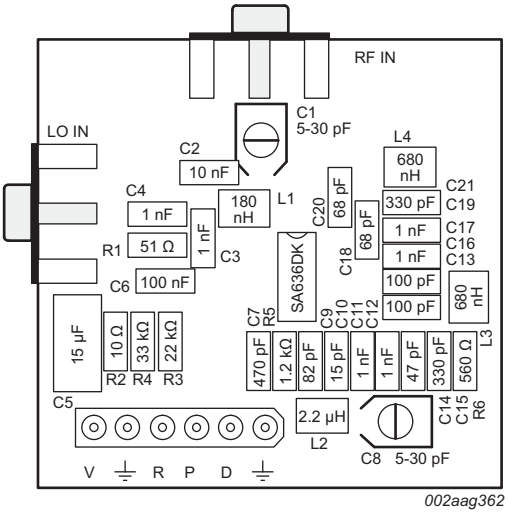


SA636 110.592 MHz (RF), 9.8 MHz (IF) DECT application circuit

DECT application circuit electrical characteristics

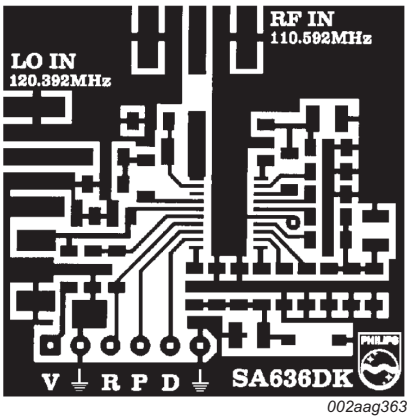
RF frequency = 110.592 MHz; IF frequency = 9.8 MHz; RF level = −45 dBm; FM modulation = 100 kHz with ±288 kHz peak deviation.

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
Mixer/oscillator section (external LO = 160 mV RMS value)						
$G_{p(conv)}$	conversion power gain		-	13	-	dB
NF	noise figure	at 110 MHz	-	12	-	dB
$IP3_i$	input third-order intercept point	matched f1 = 110.592 MHz; f2 = 110.892 MHz	-	−15	-	dBm
$R_{i(RF)}$	RF input resistance		-	690	-	Ω
$C_{i(RF)}$	RF input capacitance		-	3.6	-	pF
IF section						
$G_{amp(IF)}$	IF amplifier gain	330 Ω load	-	38	-	dB
G_{lim}	limiter gain	330 Ω load	-	54	-	dB
$V_{o(RMS)}$	RMS output voltage	R_L = 3 kΩ	-	130	-	mV
B_{3dB}	3 dB bandwidth		-	700	-	kHz
RF/IF section (internal LO)						
$V_{o(RSSI)}$	RSSI output voltage	system; RF level = −10 dBm	-	1.4	-	V
S/N	signal-to-noise ratio	system; RF level = −83 dBm	-	10	-	dB



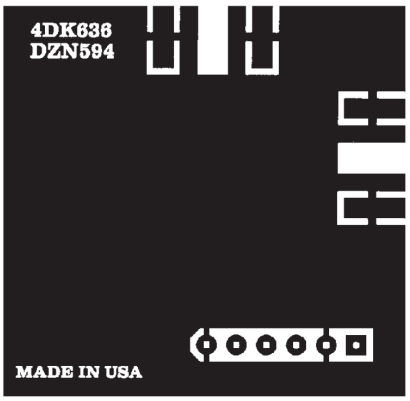
002aag362

a. Top silk screen



002aag363

b. Top view



002aag364

c. Bottom view

Remark: Not actual size.

SA636 demo board layout (SSOP20)