

EASY-TO-USE, LOW-CURRENT OOK/(G)FSK SUB-GHZ RECEIVER

Selected Electrical Specification

Parameter	Symbol	Test Condition	Min	Тур	Max	Unit
Supply Voltage	V_{DD}		1.8	3.3	3.6	V
Frequency Range	F _{RX}		283	_	350	MHz
			425	_	525	MHz
			850	_	960	MHz
Current Consumption	I _{Shutdown}		_	30	_	nA
	I _{Standby}		_	50	_	nA
	I _{RX}		_	10	_	mA
Rx Sensitivity	P _{RX2}	BER <0.1%, 2.4 kbps, GFSK, BT = 0.5, ΔF = 25kHz, 114 kHz Rx BW	_	-116	_	dBm
	P _{RXOOK}	BER < 0.1%, 1 kbps, 185 kHz Rx BW, OOK, PN15 data	_	-113	_	dBm
Selectivity ²	C/I _{1-CH}	±1 Channel Offset	_	-56	_	dB
	C/I _{2-CH}	±2 Channel Offset	_	-59	_	dB
Blocking ²	200k _{BLOCK}	200 kHz-1 MHz Offset	_	-58	_	dB
	1M _{BLOCK}	1 MHz Offset	_	- 61	_	dB
	8M _{BLOCK}	8 MHz Offset	_	-79	_	dB
Image Rejection	Im _{REJ}	Rejection at the image frequency IF = 468 kHz	_	-35	_	dB
Data Rate	DR _{FSK}	(G)FSK Modulation	1.0	_	500	kbps
	DR _{OOK}	OOK Modulation	0.5	_	120	kbps

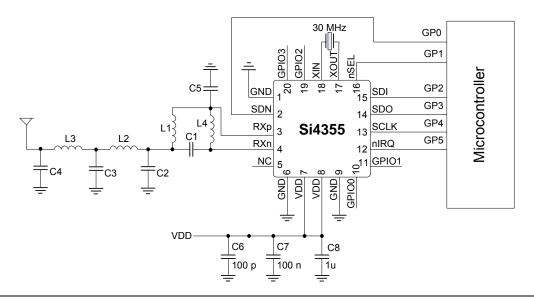
Notes:

- 1. Test Conditions: 3.3 VDC V_{DD} , 25 °C, external reference signal (X_{IN}) = 1.0 V_{PP} at 30MHz, centered around 0.8 VDC. Sensitivity measured at 434 MHz.
- 2. Desired reference signal 3 dB above sensitivity, BER < 0.1%, Interferer is CW and desired modulation with 2.4 kbps, ΔF = 30 kHz, GFSK with BT = 0.5, Rx BW = 114 kHz, 100 kHz channel spacing.

Ordering Guide

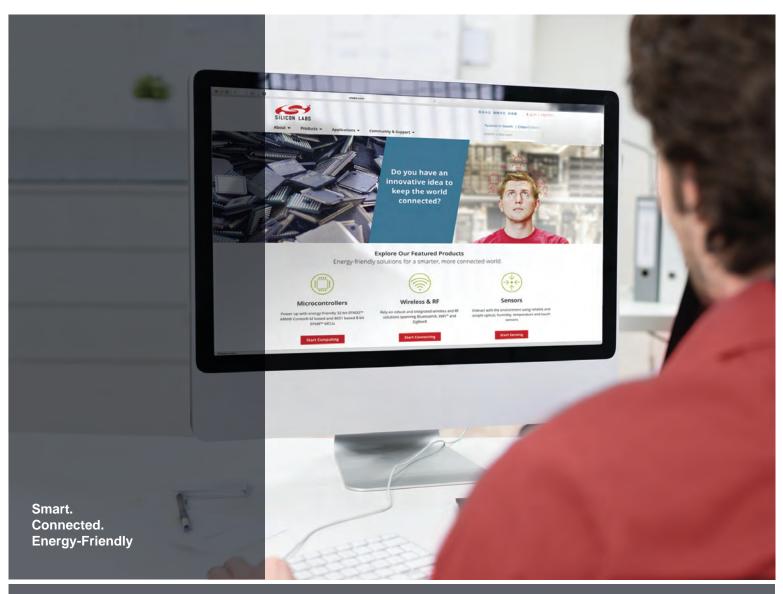
Part Number*	Description	Package Type	Operating Temperature				
Si4355-B1A-FM	EZRadio Transceiver	3x3 QFN-20 Pb-free	–40 to 85 °C				
*Note: Add an "R" at the end of the device part number to denote tape and reel option.							

Application Circuit



EZRadio

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