

## MAX6226 Evaluation Kit

Evaluates: MAX6226

### General Description

The MAX6226 evaluation kit (EV kit) provides a proven design to evaluate the MAX6226 low-noise precision ceramic voltage reference. The output voltage is set at 2.5V.

The EV kit comes installed with a MAX6226ALA25+ in 8-pin ceramic Leadless Chip Carrier (LCC) package.

### Features

- Configurable for Precision Current Source
- Proven PCB Layout
- Fully Assembled and Tested

**Ordering Information** appears at end of data sheet.

### Quick Start

#### Required Equipment

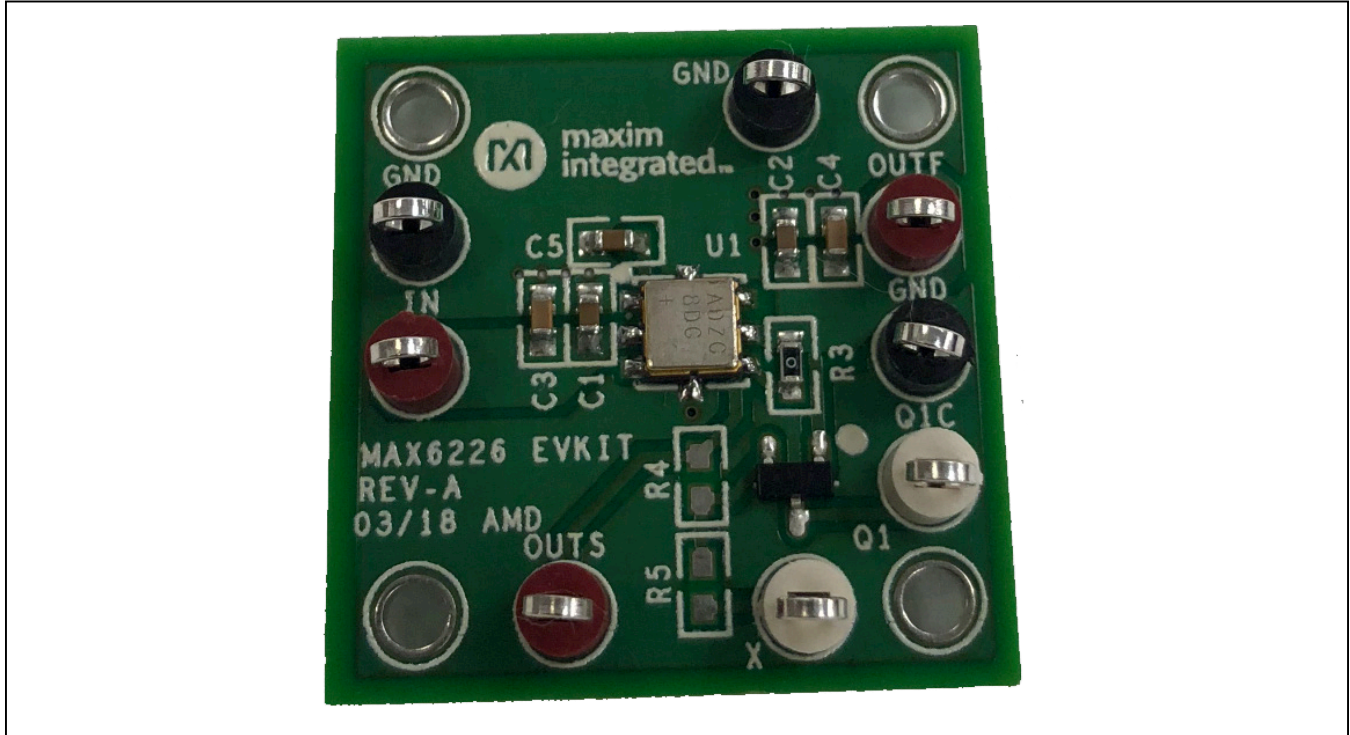
- MAX6226 EV kit
- +5V DC power supply
- Voltmeter

#### Procedure

The EV kit is fully assembled and tested. Follow the steps below to verify board operation:

- 1) Set the DC power supply to +5V. Connect the positive terminal to the IN test point and the negative terminal to GND test point.
- 2) Connect the voltmeter between OUTF and GND test point.
- 3) Turn on the DC power supply.
- 4) Verify that the voltmeter displays 2.5V.

### MAX6226 EV Kit Photo



### General Description of Hardware

The MAX6226 EV kit demonstrates the MAX6226, a very low noise and low-drift voltage reference in a small 8-pin LCC package. The EV kit requires a +2.7V to +12.6V input supply voltage at the IN pin for normal operation.

### Precision Current Source

To use the EV kit as a precision current source, remove the resistor at R3, install a 0Ω resistor at location R4, and connect the X test point to GND. Install an appropriate resistor at location R5 to determine the current by using the following equation.

$$I_{SOURCE} = \frac{V_{OUT(NOMINAL)}}{R5}$$

### Ordering Information

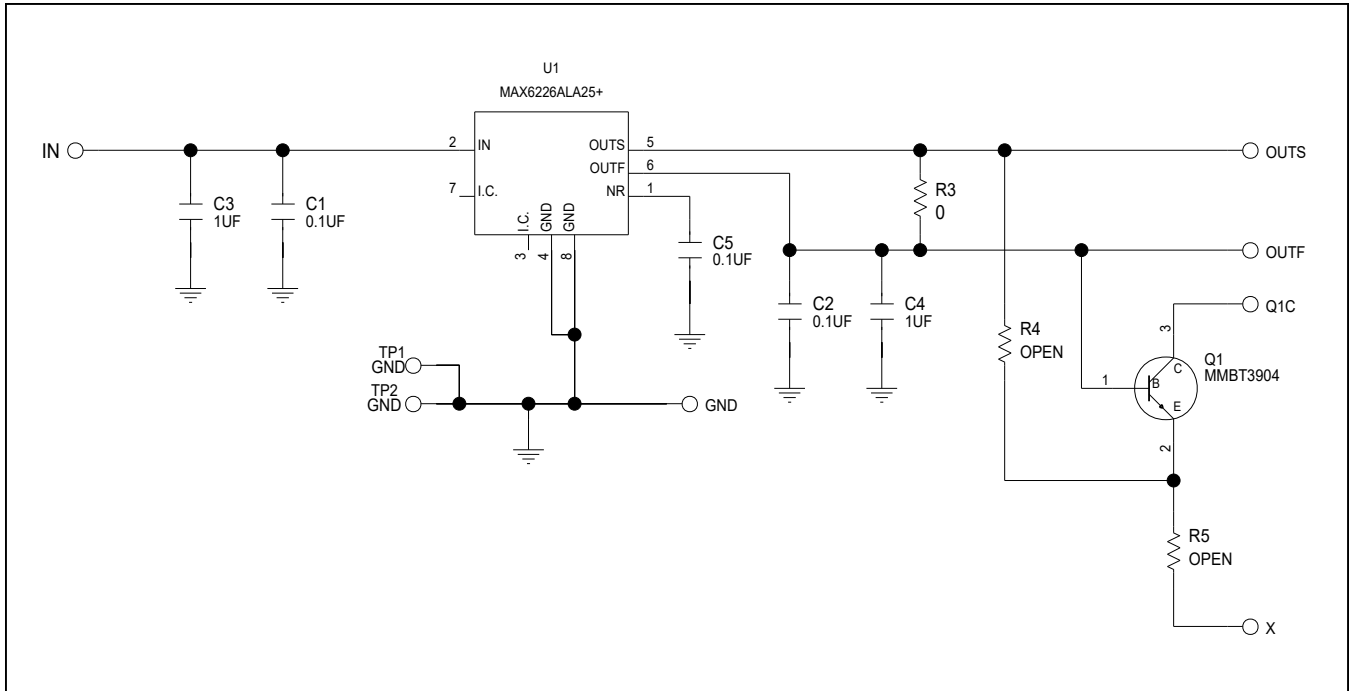
PART	TYPE
MAX6226EVKIT#	EV Kit

#Denotes RoHS compliant.

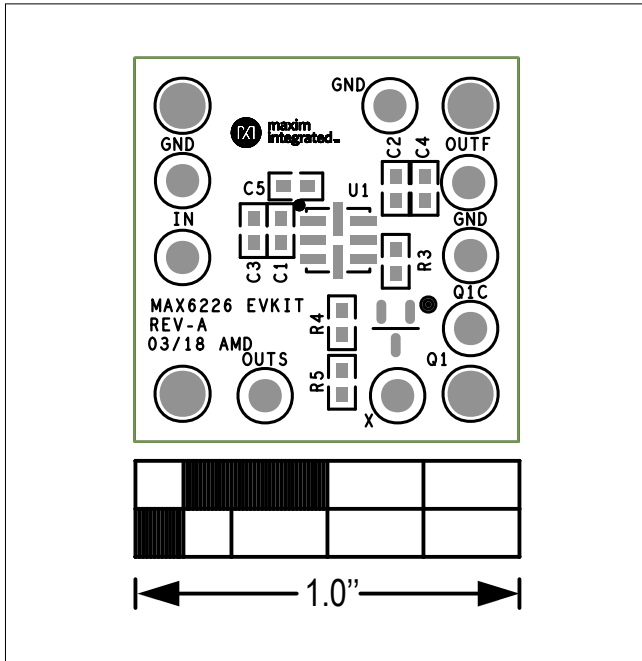
### MAX6226 EV Kit Bill of Materials

ITEM	REF_DES		QTY	MFG PART #	MANUFACTURER	VALUE	DESCRIPTION	COMMENTS
1	C1, C2, C5		3	C0603C104K5RAC; C1608X7R1H104K	KEMET;TDK	0.1UF	CAPACITOR; SMT (0603); CERAMIC CHIP; 0.1UF; 50V; TOL=10%; TG=-55 DEGC TO +125 DEGC; TC=X7R;	
2	C3, C4		2	C0603C105K4RAC; GRM188R71C105KA12; C1608X7R1C105K; EMK107B7105KA	KEMET;MURATA; TDK;TAIYO YUDEN	1UF	CAPACITOR; SMT (0603); CERAMIC CHIP; 1UF; 16V; TOL=10%; MODEL=; TG=-55 DEGC TO +125 DEGC; TC=X7R	
3	GND, TP1, TP2		3	5006	KEYSTONE	N/A	TEST POINT; PIN DIA=0.125IN; TOTAL LENGTH=0.35IN; BOARD HOLE=0.063IN; BLACK; PHOSPHOR BRONZE WIRE SILVER PLATE FINISH;	
4	IN, OUTF, OUTS		3	5005	KEYSTONE	N/A	TEST POINT; PIN DIA=0.125IN; TOTAL LENGTH=0.35IN; BOARD HOLE=0.063IN; RED; PHOSPHOR BRONZE WIRE SILVER PLATE FINISH;	
5	Q1		1	MMBT3904	ON SEMICONDUCTOR	MMBT3904	TRANSISTOR, NPN, SOT-23, PD=0.225W, IC=0.2A, VCEO=40V	
6	Q1C, X		2	5007	KEYSTONE	N/A	TEST POINT; PIN DIA=0.125IN; TOTAL LENGTH=0.35IN; BOARD HOLE=0.063IN; WHITE; PHOSPHOR BRONZE WIRE SILVER PLATE FINISH;	
7	R3		1	CRCW06030000ZS; MCR03EZPJ000; ERJ-3GEY0R00	VISHAY DALE; ROHM;PANASONIC	0	RESISTOR; 0603; 0 OHM; 0%; JUMPER; 0.10W; THICK FILM	
8	U1		1	MAX6226ALA25+	MAXIM	MAX6226ALA25+	EVKIT PART-IC; PACKAGE CODE: L8-2; PACKAGE OUTLINE DRAWING: 21-100289	
9	PCB		1	MAX	MAXIM	PCB	PCB:MAX	-
10	R4, R5	DNP	0	N/A	N/A	OPEN	PACKAGE OUTLINE 0603 RESISTOR	
TOTAL			17					

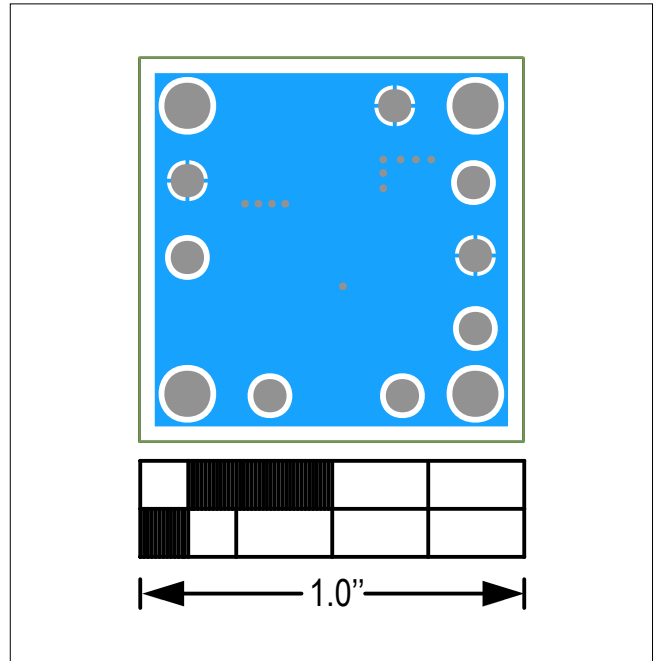
MAX6226 EV Kit Schematic



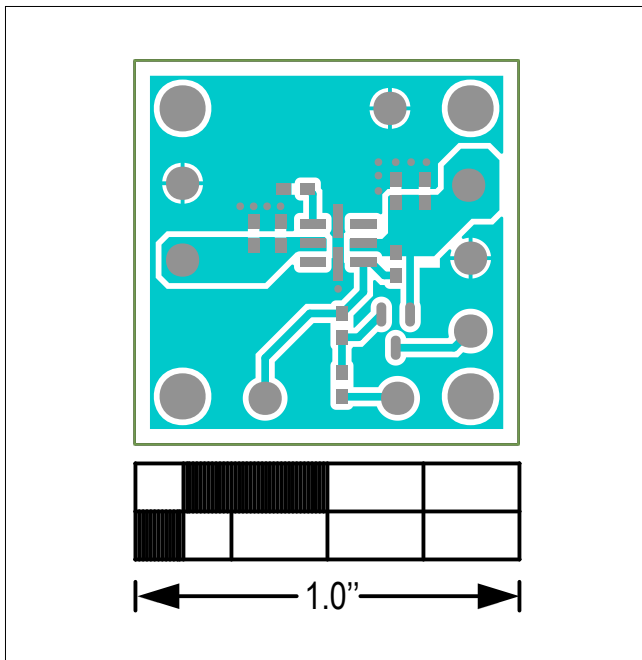
MAX6226 EV Kit PCB Layouts



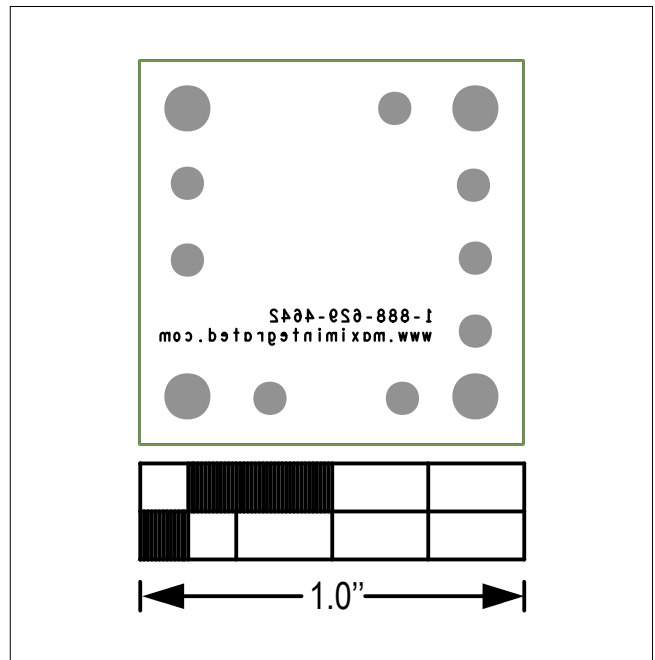
MAX6226 EV PCB Top Silkscreen



MAX6226 EV PCB Bottom Layer



MAX6226 EV PCB Top Layer



MAX6226 EV PCB Bottom Silkscreen

## Revision History

REVISION NUMBER	REVISION DATE	DESCRIPTION	PAGES CHANGED
0	12/18	Initial release	—

For pricing, delivery, and ordering information, please visit Maxim Integrated's online storefront at <https://www.maximintegrated.com/en/storefront/storefront.html>.

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