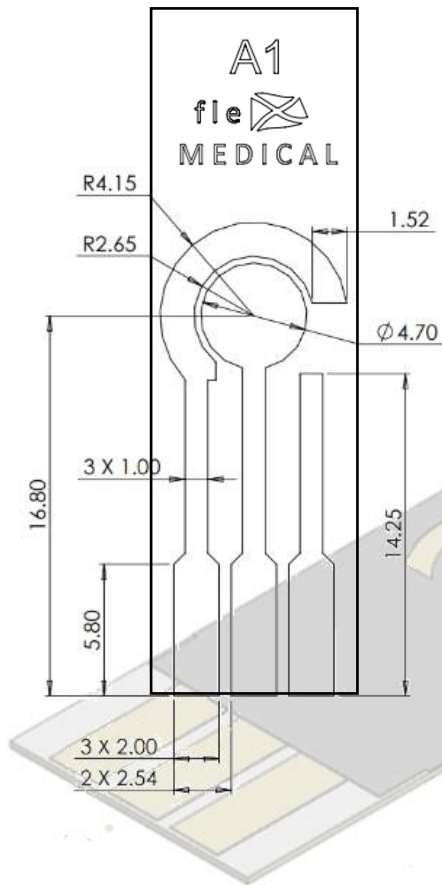


# Thin-film Gold Electrodes

FMS-0009



Electrochemical Technique	Suitable
Chronoamperometry	<input checked="" type="checkbox"/>
Cyclic Voltammetry	<input checked="" type="checkbox"/>
Square Wave Voltammetry	<input checked="" type="checkbox"/>
Differential Pulse Voltammetry	<input checked="" type="checkbox"/>
Open Circuit Potentiometry	<input checked="" type="checkbox"/>
Electrochemical Impedance Spectroscopy	<input checked="" type="checkbox"/>
Others	Inquire

## Sample Performance Data

The following data describes typical expected performance from the sensors within a batch. Please contact the manufacturer for batch-to-batch performance information.

### Method of analysis.

Analysis was performed by cyclic voltammetry using 5mM Potassium Ferri/ferrocyanide in 10mM PBS pH7.4

### Settings

- Estart: 0.1V
- Evertex1: 0.6V
- Evertex2: -0.5V
- Steps: 0.01V
- Rate: 0.05V/s
- Cycles: 4

### Results

The below voltammogram was obtained using the above settings. The initial scan (starting at 0.1V was removed)

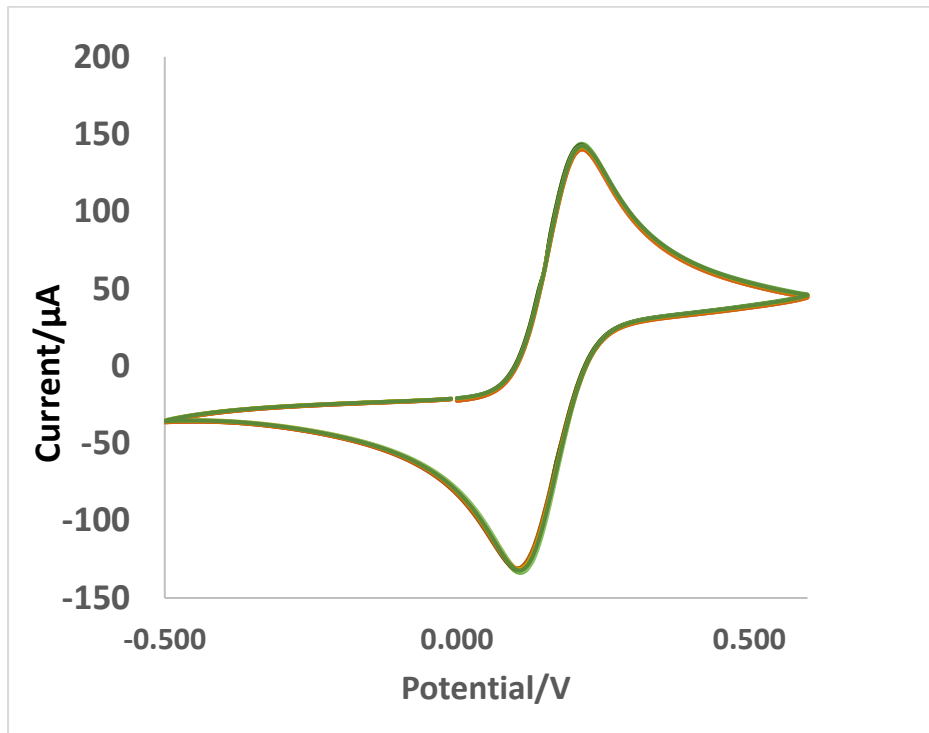


Figure 1: 3 successive scans of mediator solution on electrode

## Sample Performance Data (cont.)

### Between scan characteristics (within electrode)

Oxidation peak: 139.4uA at 0.21V

Reduction peak: -129.4uA at 0.10V

### Peak repeatability (3 scans across 20 sensors within batch)

#### Oxidation peak coefficient of variation:

Stability 0.9% (scan to scan within sensor)

Repeatability 2.2% (between electrodes)

#### Reduction peak coefficient of variation:

Stability 0.6% (scan to scan within sensor)

Repeatability 2.4% (between electrodes)

### Single use

The electrodes are designed to be single use, for best result use once then discard.

## Technical Data

Parameter	Value
Working Electrode	Sputtered Gold
Counter Electrode	Sputtered Gold
Reference Electrode	Ag/AgCl
Substrate	PET
Conductive Tracks	Sputtered Gold
Working Area	12.6 mm <sup>2</sup>
Sample Volume	50 – 100 µL
Usage	Single use
Application	For R&D use only.

*Engineering and usage data for FMS-0009-thin-film gold electrodes*

For more information contact: [info@FlexMedical-Solutions.com](mailto:info@FlexMedical-Solutions.com)