# AUTOMOTIVE GALVANICALLY ISOLATED CURRENT SENSOR WITH COMMON-MODE FIELD REJECTION

## Description

The AHC1725Q current sensor IC is an economical and precise solution for AC or DC current sensing in industrial, automotive, commercial, and communications systems. The small package is ideal for space-constrained applications while also saving costs due to reduced board area.

The device consists of a precise, low-offset, linear Hall sensor circuit with a copper conduction path located near the surface of the die. Applied current flowing through this copper conduction path generates a magnetic field which is sensed by the integrated Hall IC and converted into a proportional voltage. The current is sensed differentially in order to reject common-mode fields, improving accuracy in magnetically noisy environments.

The inherent device accuracy is optimized through the close proximity of the magnetic field to the Hall transducer. A precise, proportional voltage is provided by the low-offset, chopper-stabilized architecture, which is programmed for accuracy after packaging. The output of the device has a positive slope when an increasing current flows through the primary copper conduction path (from pins 1 and 2, to pins 3 and 4), which is the path used for current sensing. The internal resistance of this conductive path is 1.2mΩ typical, providing low power loss.

The terminals of the conductive path are electrically isolated from the sensor leads (pins 5 through 8). This allows the AHC1725Q current sensor IC to be used in high-side current sense applications without the use of high-side differential amplifiers or other costly isolation techniques.

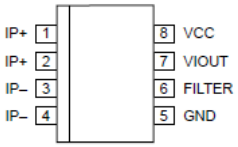
The AHC1725Q is provided in a small, low-profile surface-mount SO-8 (Type CJ2) package. The leadframe is plated with 100% matte tin, which is compatible with standard lead (Pb) free printed circuit board assembly processes.

## Features

- AEC-Q100 Qualified -40°C to +150°C Operating Temperature
- Ratiometric Output from 3.3V Supply Operating Voltage Range
- High-Bandwidth 120kHz Analog Output for Faster Response Time
- Differential Hall Sensing Rejects Common-Mode Fields
- 1.2mΩ Primary Conductor Resistance for Low Power Loss and High Inrush Current Withstand Capability
- ESD HBM: 6kV, CDM: 2kV
- Industrial-Standard SO-8 (Type CJ2) Package
- **Totally Lead-Free & Fully RoHS Compliant (Notes 1 & 2)**
- **Halogen and Antimony Free. "Green" Device (Note 3)**
- **The AHC1725Q is suitable for automotive applications requiring specific change control; this part is AEC-Q100 qualified, PPAP capable, and manufactured in IATF16949 certified facilities.**
  **https://www.diodes.com/quality/product-definitions/**

## Pin Assignments

(Top View)




SO-8 (Type CJ2)

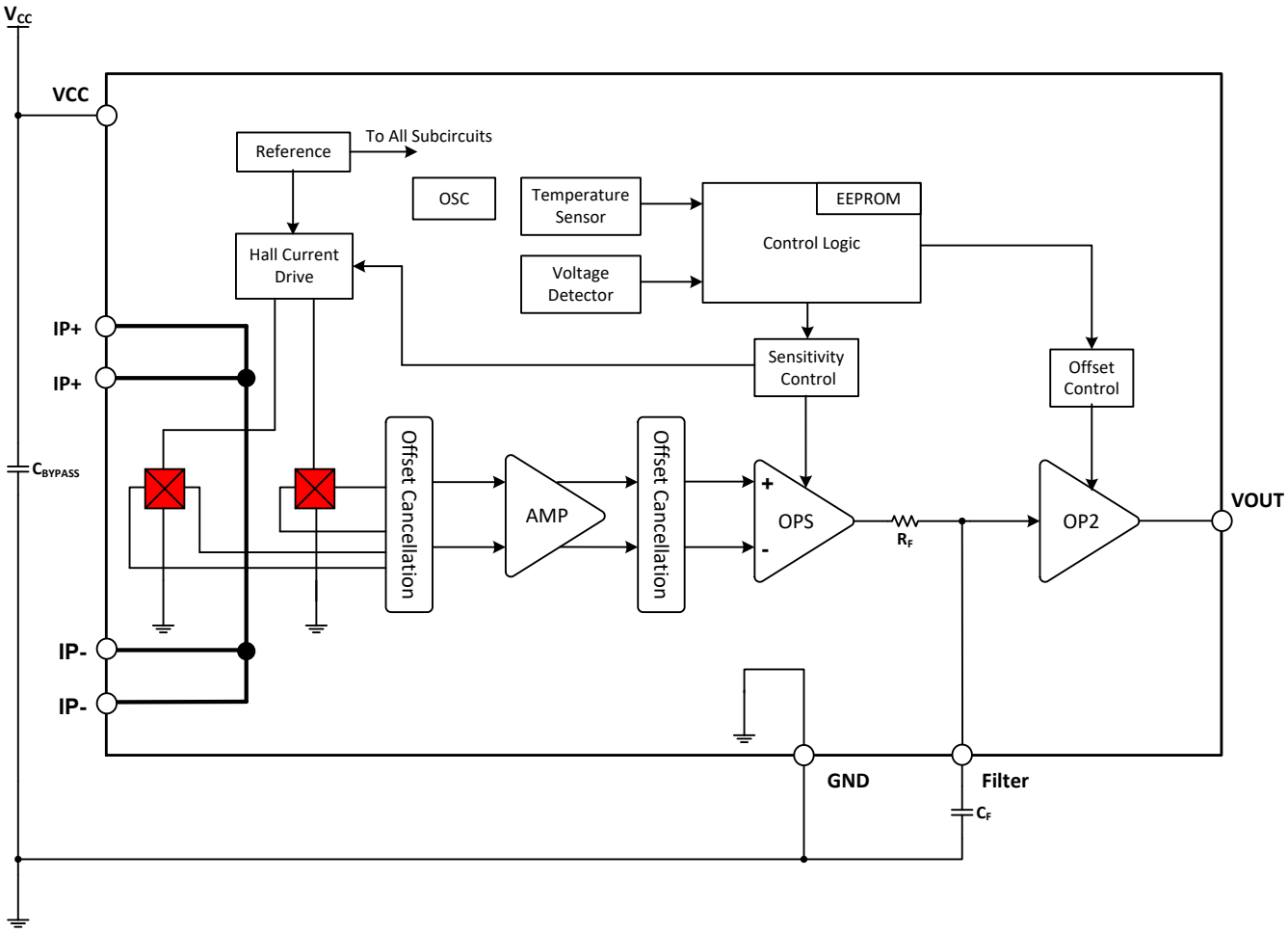
## Applications

- Motor control
- Load detection and management
- Switched-mode power supplies
- Overcurrent fault protection
- Solar microinverters
- Base station radio power amplifiers
- Server power, PSU, PDU, UPS
- xEV OBC, charging stations

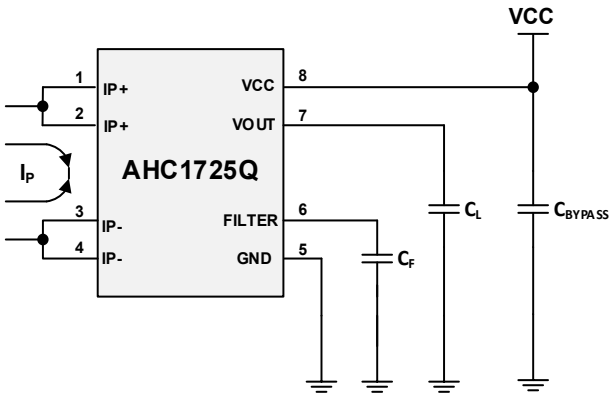
Notes:
1. No purposely added lead. Fully EU Directive 2002/95/EC (RoHS), 2011/65/EU (RoHS 2) & 2015/863/EU (RoHS 3) compliant.
2. See https://www.diodes.com/quality/lead-free/ for more information about Diodes Incorporated's definitions of Halogen- and Antimony-free, "Green" and Lead-free.
3. Halogen- and Antimony-free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.


© 2026 Copyright Diodes Incorporated. All Rights Reserved.

## Functional Block Diagram




## Typical Applications Circuit (Note 4)




Note: 4. The AHC1725Q outputs an analog signal, VOUT, that changes proportionally with the bidirectional AC or DC primary sensed current, $I_P$, within the specified measurement range. The FILTER pin can be used to decrease the bandwidth in order to optimize the noise performance. $C_F$ = 4.7nF, $C_L$ = 1nF, $C_{BYPASS}$ = 100nF.


© 2026 Copyright Diodes Incorporated. All Rights Reserved.

## Pin Descriptions

**Package: SO-8 (Type CJ2)**

| Pin Number | Pin Name | Function |
|---|---|---|
| 1, 2 | IP+ | Primary current (+). Terminals for current being sensed; fused internally |
| 3, 4 | IP- | Primary current (-). Terminals for current being sensed; fused internally |
| 5 | GND | Signal ground terminal |
| 6 | FILTER | Terminal for external capacitor that sets bandwidth |
| 7 | VOUT | Analog output signal |
| 8 | VCC | Device power supply terminal |

## Selection Guide

| Part Number | $I_{PR}$ (A) | Sens (Typ) at $V_{CC}$ = 3.3V (mV/A) | $T_A$ (°C) | Packing |
|---|---|---|---|---|
| AHC1725Q-05B | ±5 | 264 | -40 to 150 | Tape and Reel, 4000 Pieces per Reel |
| AHC1725Q-10U | 10 | 264 | | |
| AHC1725Q-10B | ±10 | 132 | | |
| AHC1725Q-20U | 20 | 132 | | |
| AHC1725Q-20B | ±20 | 66 | | |
| AHC1725Q-30U | 30 | 88 | | |
| AHC1725Q-30B | ±30 | 44 | | |
| AHC1725Q-40B | ±40 | 33 | | |
| AHC1725Q-50B | ±50 | 26.4 | | |

## Absolute Maximum Ratings (@$T_A$ = +25°C, unless otherwise specified.)

| Symbol | Characteristic | Value | Unit |
|---|---|---|---|
| $V_{CC}$ | Supply Voltage | 6 | V |
| $V_{RCC}$ | Reverse Supply Voltage | -0.1 | V |
| $V_{OUT}$ | Output Voltage | VCC + 0.5 | V |
| $V_{ROUT}$ | Reverse Output Voltage | -0.1 | V |
| $T_A$ | Operating Ambient Temperature | -40 to 150 | °C |
| $T_{J(MAX)}$ | Junction Temperature | 165 | °C |
| $T_{STG}$ | Storage Temperature | -65 to 165 | °C |
| ESD HBM | Electrostatic Discharge Withstand Capability — Human Body Model | 6 | kV |
| ESD CDM | Electrostatic Discharge Withstand Capability — Charged Device Model | 2 | kV |

## Isolation Characteristics

| Symbol | Characteristics | Conditions | Rating | Unit |
|---|---|---|---|---|
| $V_{SURGE}$ | Dielectric Surge Strength Test Voltage | Tested ±5 pulses at 2/minute in compliance to IEC 61000-4-5 1.2µs (rise) / 50µs (width). | 6000 | V |
| $V_{ISO}$ | Dielectric Strength Test Voltage | Agency type-tested for 60 seconds per UL standard UL 62368-1; production-tested at VISO for 1 second, in accordance with UL 62368-1. | 2400 | $V_{RMS}$ |
| $V_{WVBI}$ | Working Voltage for Basic Isolation | Maximum approved working voltage for basic (single) isolation according to UL 62368-1. | 420 | $V_{PK}$ or VDC |
| | | | 297 | $V_{RMS}$ |
| $D_D$ | Clearance | Minimum distance through air from IP leads to signal leads. | 4.2 | mm |
| $D_{CR}$ | Creepage | Minimum distance along package body from IP leads to signal leads. | 4.2 | mm |
| CTI | Comparative Tracking Index | Material Group II | 400 to 599 | V |


© 2026 Copyright Diodes Incorporated. All Rights Reserved.

## Thermal Characteristics

| Symbol | Characteristics | Conditions | Rating | Unit |
|---|---|---|---|---|
| $R_{\theta JA}$ | Package Thermal Resistance (Junction to Ambient) | Mounted on the Diodes TDBH0203 EVM board with 1700mm$^2$ of 4oz. copper on each side, connected to pins 1 and 2, and to pins 3 and 4, with thermal vias connecting the layers. Performance values include the power consumed by the PCB. | 30 | °C/W |

## Common Electrical Characteristics (Note 5) (Valid through the full range of $T_A$, $V_{CC}$ = 3.3V, $C_F$ = 0F, unless otherwise specified.)

| Characteristic | Symbol | Test Conditions | Min | Typ | Max | Unit |
|---|---|---|---|---|---|---|
| Supply Voltage | $V_{CC}$ | — | 3.0 | — | 3.6 | V |
| Supply Current | $I_{CC}$ | $V_{CC}$ = 3.3V, Output Open | — | 7 | 14 | mA |
| Output Capacitance Load | $C_L$ | VOUT to GND | — | — | 10 | nF |
| Output Resistive Load | $R_L$ | VOUT to GND | 4.7 | — | — | kΩ |
| Primary Conductor Resistance | $R_{IP}$ | $T_A$ = 25°C | — | 1.2 | — | mΩ |
| Primary Conductor Inductance | $L_{IP}$ | $T_A$ = 25°C | — | 2 | — | nH |
| Internal Filter Resistance (Note 6) | $R_{F(INT)}$ | — | — | 1.8 | — | kΩ |
| Common Mode Field Rejection Ratio | CMFRR | Uniform External Magnetic Field | — | 40 | — | dB |
| Primary Hall Coupling Factor | G1 | $T_A$ = 25°C | — | 11 | — | G/A |
| Secondary Hall Coupling Factor | G2 | $T_A$ = 25°C | — | 2.8 | — | G/A |
| Hall Plate Sensitivity Matching | $Sens_{MATCH}$ | $T_A$ = 25°C | — | ±1 | — | % |
| Rise Time | $t_R$ | $T_A$ = 25°C, $C_L$ = 1nF | — | 3 | — | µs |
| Propagation Delay | $t_{PD}$ | $T_A$ = 25°C, $C_L$ = 1nF | — | 2 | — | µs |
| Response Time | $t_{RESPONSE}$ | $T_A$ = 25°C, $C_L$ = 1nF | — | 4 | — | µs |
| Bandwidth | $B_W$ | Small Signal -3dB; $C_L$ = 1nF | — | 120 | — | kHz |
| Noise Density | $I_{ND}$ | Input-Referenced Noise Density; $T_A$ = 25°C, $C_L$ = 1nF | — | 200 | — | µA(rms)/√Hz |
| Noise | $I_N$ | Input-Referenced Noise: $C_F$ = 4.7nF, $C_L$ = 1nF, $B_W$ = 18kHz, $T_A$ = 25°C | — | 27 | — | mA(rms) |
| Nonlinearity | $E_{LIN}$ | Through Full Range of $I_P$ | –1.5 | — | 1.5 | % |
| Sensitivity Ratiometry Coefficient | SENS_RAT_COEF | $V_{CC}$ = 3.0V to 3.6V, $T_A$ = 25°C | — | 1.3 | — | — |
| Zero-Current Output Ratiometry Coefficient | QVO_RAT_COEF | $V_{CC}$ = 3.0V to 3.6V, $T_A$ = 25°C | — | 1 | — | — |
| Saturation Voltage (Note 7) | $V_{OH}$ | $R_L$ = 4.7kΩ | — | VCC – 0.3 | — | V |
| | $V_{OL}$ | $R_L$ = 4.7kΩ | — | 0.3 | — | V |
| Power-On Time | $t_{PO}$ | $T_A$ = 25°C, $V_{CC} \geq V_{CC(MIN)}$ to Valid Output | — | 80 | — | µs |
| Shorted Output-to-Ground Current | $I_{SC(GND)}$ | $T_A$ = 25°C | — | 3.3 | — | mA |
| Shorted Output-to-VCC Current | $I_{SC(VCC)}$ | $T_A$ = 25°C | — | 45 | — | mA |

Notes: 5. Device may be operated at higher primary current levels, $I_P$, ambient temperatures, $T_A$, and internal leadframe temperatures, provided the Maximum Junction Temperature, $T_{J(MAX)}$, is not exceeded.
6. $R_{F(INT)}$ forms an RC circuit via the FILTER pin.
7. The sensor IC will continue to respond to current beyond the range of $I_P$ until the high or low saturation voltage; however, the nonlinearity in this region will be worse than through the rest of the measurement range.


© 2026 Copyright Diodes Incorporated. All Rights Reserved.

## AHC1725Q-05B (Valid at $T_A$ = -40°C to +150°C, $V_{CC}$ = 3.3V, unless otherwise specified.)

| Characteristic | Symbol | Test Conditions | Min | Typ (Note 8) | Max | Unit |
|---|---|---|---|---|---|---|
| **NORMAL PERFORMANCE** | | | | | | |
| Current Sensing Range | $I_{PR}$ | — | -5 | — | 5 | A |
| Sensitivity | Sens | $I_{PR(MIN)} < I_P < I_{PR(MAX)}$ | — | 264 | — | mV/A |
| Zero-Current Output Voltage | $V_{OUT(Q)}$ | Bidirectional, $I_P$ = 0A | — | $V_{CC}$ × 0.5 | — | V |
| **ACCURACY PERFORMANCE** | | | | | | |
| Total Output Error (Note 9) | $E_{TOT}$ | $I_P = I_{PR(MAX)}$, $T_A$ = 25°C to 150°C | -2.5 | ±0.9 | 2.5 | % |
| | | $I_P = I_{PR(MAX)}$, $T_A$ = -40°C to 25°C | -6 | ±4 | 6 | % |
| Sensitivity Error | $E_{SENS}$ | $I_P = I_{PR(MAX)}$, $T_A$ = 25°C to 150°C | -2 | ±1 | 2 | % |
| | | $I_P = I_{PR(MAX)}$, $T_A$ = -40°C to 25°C | -5.5 | ±4 | 5.5 | % |
| Voltage Offset Error | $V_{OE}$ | $I_P$ = 0A, $T_A$ = 25°C to 150°C | -15 | ±5 | 15 | mV |
| | | $I_P$ = 0A, $T_A$ = -40°C to 25°C | -30 | ±15 | 30 | mV |
| **LIFETIME DRIFT CHARACTERISTICS** | | | | | | |
| Sensitivity Error Lifetime Drift | $E_{SENSE_DRIFT}$ | — | -3 | ±1 | 3 | % |
| Total Output Error Lifetime Drift | $E_{TOT_DRIFT}$ | — | -3 | ±1 | 3 | % |

## AHC1725Q-10U (Valid at $T_A$ = -40°C to +150°C, $V_{CC}$ = 3.3V, unless otherwise specified.)

| Characteristic | Symbol | Test Conditions | Min | Typ (Note 8) | Max | Unit |
|---|---|---|---|---|---|---|
| **NORMAL PERFORMANCE** | | | | | | |
| Current Sensing Range | $I_{PR}$ | — | 0 | — | 10 | A |
| Sensitivity | Sens | $I_{PR(MIN)} < I_P < I_{PR(MAX)}$ | — | 264 | — | mV/A |
| Zero-Current Output Voltage | $V_{OUT(Q)}$ | Unidirectional, $I_P$ = 0A | — | $V_{CC}$ × 0.1 | — | V |
| **ACCURACY PERFORMANCE** | | | | | | |
| Total Output Error (Note 9) | $E_{TOT}$ | $I_P = I_{PR(MAX)}$, $T_A$ = 25°C to 150°C | -2.5 | ±0.9 | 2.5 | % |
| | | $I_P = I_{PR(MAX)}$, $T_A$ = -40°C to 25°C | -6 | ±4 | 6 | % |
| Sensitivity Error | $E_{SENS}$ | $I_P = I_{PR(MAX)}$, $T_A$ = 25°C to 150°C | -2 | ±1 | 2 | % |
| | | $I_P = I_{PR(MAX)}$, $T_A$ = -40°C to 25°C | -5.5 | ±4 | 5.5 | % |
| Voltage Offset Error | $V_{OE}$ | $I_P$ = 0A, $T_A$ = 25°C to 150°C | -15 | ±5 | 15 | mV |
| | | $I_P$ = 0A, $T_A$ = -40°C to 25°C | -30 | ±15 | 30 | mV |
| **LIFETIME DRIFT CHARACTERISTICS** | | | | | | |
| Sensitivity Error Lifetime Drift | $E_{SENSE_DRIFT}$ | — | -3 | ±1 | 3 | % |
| Total Output Error Lifetime Drift | $E_{TOT_DRIFT}$ | — | -3 | ±1 | 3 | % |

## AHC1725Q-10B (Valid at $T_A$ = -40°C to +150°C, $V_{CC}$ = 3.3V, unless otherwise specified.)

| Characteristic | Symbol | Test Conditions | Min | Typ (Note 8) | Max | Unit |
|---|---|---|---|---|---|---|
| **NORMAL PERFORMANCE** | | | | | | |
| Current Sensing Range | $I_{PR}$ | — | -10 | — | 10 | A |
| Sensitivity | Sens | $I_{PR(MIN)} < I_P < I_{PR(MAX)}$ | — | 132 | — | mV/A |
| Zero-Current Output Voltage | $V_{OUT(Q)}$ | Bidirectional, $I_P$ = 0A | — | $V_{CC}$ × 0.5 | — | V |
| **ACCURACY PERFORMANCE** | | | | | | |
| Total Output Error (Note 9) | $E_{TOT}$ | $I_P = I_{PR(MAX)}$, $T_A$ = 25°C to 150°C | -2.5 | ±0.8 | 2.5 | % |
| | | $I_P = I_{PR(MAX)}$, $T_A$ = -40°C to 25°C | -6 | ±4 | 6 | % |
| Sensitivity Error | $E_{SENS}$ | $I_P = I_{PR(MAX)}$, $T_A$ = 25°C to 150°C | -2 | ±1 | 2 | % |
| | | $I_P = I_{PR(MAX)}$, $T_A$ = -40°C to 25°C | -5.5 | ±4 | 5.5 | % |
| Voltage Offset Error | $V_{OE}$ | $I_P$ = 0A, $T_A$ = 25°C to 150°C | -10 | ±4 | 10 | mV |
| | | $I_P$ = 0A, $T_A$ = -40°C to 25°C | -30 | ±15 | 30 | mV |
| **LIFETIME DRIFT CHARACTERISTICS** | | | | | | |
| Sensitivity Error Lifetime Drift | $E_{SENSE_DRIFT}$ | — | -3 | ±1 | 3 | % |
| Total Output Error Lifetime Drift | $E_{TOT_DRIFT}$ | — | -3 | ±1 | 3 | % |

Notes: 8. Typical values with +/- are 3 sigma values.
9. Percentage of $I_P$, with $I_P = I_{PR(MAX)}$.


© 2026 Copyright Diodes Incorporated. All Rights Reserved.

## AHC1725Q-20U (Valid at $T_A$ = -40°C to +150°C, $V_{CC}$ = 3.3V, unless otherwise specified.)

| Characteristic | Symbol | Test Conditions | Min | Typ (Note 8) | Max | Unit |
|---|---|---|---|---|---|---|
| **NORMAL PERFORMANCE** | | | | | | |
| Current Sensing Range | $I_{PR}$ | — | 0 | — | 20 | A |
| Sensitivity | Sens | $I_{PR(MIN)} < I_P < I_{PR(MAX)}$ | — | 132 | — | mV/A |
| Zero-Current Output Voltage | $V_{OUT(Q)}$ | Unidirectional, $I_P$ = 0A | — | $V_{CC}$ × 0.1 | — | V |
| **ACCURACY PERFORMANCE** | | | | | | |
| Total Output Error (Note 9) | $E_{TOT}$ | $I_P = I_{PR(MAX)}$, $T_A$ = 25°C to 150°C | -2.5 | ±0.8 | 2.5 | % |
| | | $I_P = I_{PR(MAX)}$, $T_A$ = -40°C to 25°C | -6 | ±4 | 6 | % |
| Sensitivity Error | $E_{SENS}$ | $I_P = I_{PR(MAX)}$, $T_A$ = 25°C to 150°C | -2 | ±1 | 2 | % |
| | | $I_P = I_{PR(MAX)}$, $T_A$ = -40°C to 25°C | -5.5 | ±4 | 5.5 | % |
| Voltage Offset Error | $V_{OE}$ | $I_P$ = 0A, $T_A$ = 25°C to 150°C | -10 | ±4 | 10 | mV |
| | | $I_P$ = 0A, $T_A$ = -40°C to 25°C | -30 | ±5 | 30 | mV |
| **LIFETIME DRIFT CHARACTERISTICS** | | | | | | |
| Sensitivity Error Lifetime Drift | $E_{SENSE_DRIFT}$ | — | -3 | ±1 | 3 | % |
| Total Output Error Lifetime Drift | $E_{TOT_DRIFT}$ | — | -3 | ±1 | 3 | % |

## AHC1725Q-20B (Valid at $T_A$ = -40°C to +150°C, $V_{CC}$ = 3.3V, unless otherwise specified.)

| Characteristic | Symbol | Test Conditions | Min | Typ (Note 8) | Max | Unit |
|---|---|---|---|---|---|---|
| **NORMAL PERFORMANCE** | | | | | | |
| Current Sensing Range | $I_{PR}$ | — | -20 | — | 20 | A |
| Sensitivity | Sens | $I_{PR(MIN)} < I_P < I_{PR(MAX)}$ | — | 66 | — | mV/A |
| Zero-Current Output Voltage | $V_{OUT(Q)}$ | Bidirectional, $I_P$ = 0A | — | $V_{CC}$ × 0.5 | — | V |
| **ACCURACY PERFORMANCE** | | | | | | |
| Total Output Error (Note 9) | $E_{TOT}$ | $I_P = I_{PR(MAX)}$, $T_A$ = 25°C to 150°C | -2.5 | ±0.8 | 2.5 | % |
| | | $I_P = I_{PR(MAX)}$, $T_A$ = -40°C to 25°C | -6 | ±4 | 6 | % |
| Sensitivity Error | $E_{SENS}$ | $I_P = I_{PR(MAX)}$, $T_A$ = 25°C to 150°C | -2 | ±1 | 2 | % |
| | | $I_P = I_{PR(MAX)}$, $T_A$ = -40°C to 25°C | -5.5 | ±4 | 5.5 | % |
| Voltage Offset Error | $V_{OE}$ | $I_P$ = 0A, $T_A$ = 25°C to 150°C | -10 | ±4 | 10 | mV |
| | | $I_P$ = 0A, $T_A$ = -40°C to 25°C | -30 | ±5 | 30 | mV |
| **LIFETIME DRIFT CHARACTERISTICS** | | | | | | |
| Sensitivity Error Lifetime Drift | $E_{SENSE_DRIFT}$ | — | -3 | ±1 | 3 | % |
| Total Output Error Lifetime Drift | $E_{TOT_DRIFT}$ | — | -3 | ±1 | 3 | % |

## AHC1725Q-30U (Valid at $T_A$ = -40°C to +150°C, $V_{CC}$ = 3.3V, unless otherwise specified.)

| Characteristic | Symbol | Test Conditions | Min | Typ (Note 8) | Max | Unit |
|---|---|---|---|---|---|---|
| **NORMAL PERFORMANCE** | | | | | | |
| Current Sensing Range | $I_{PR}$ | — | 0 | — | 30 | A |
| Sensitivity | Sens | $I_{PR(MIN)} < I_P < I_{PR(MAX)}$ | — | 88 | — | mV/A |
| Zero-Current Output Voltage | $V_{OUT(Q)}$ | Unidirectional, $I_P$ = 0A | — | $V_{CC}$ × 0.1 | — | V |
| **ACCURACY PERFORMANCE** | | | | | | |
| Total Output Error (Note 9) | $E_{TOT}$ | $I_P = I_{PR(MAX)}$, $T_A$ = 25°C to 150°C | -2.5 | ±0.8 | 2.5 | % |
| | | $I_P = I_{PR(MAX)}$, $T_A$ = -40°C to 25°C | -6 | ±4 | 6 | % |
| Sensitivity Error | $E_{SENS}$ | $I_P = I_{PR(MAX)}$, $T_A$ = 25°C to 150°C | -2 | ±1 | 2 | % |
| | | $I_P = I_{PR(MAX)}$, $T_A$ = -40°C to 25°C | -5.5 | ±4 | 5.5 | % |
| Voltage Offset Error | $V_{OE}$ | $I_P$ = 0A, $T_A$ = 25°C to 150°C | -10 | ±4 | 10 | mV |
| | | $I_P$ = 0A, $T_A$ = -40°C to 25°C | -30 | ±5 | 30 | mV |
| **LIFETIME DRIFT CHARACTERISTICS** | | | | | | |
| Sensitivity Error Lifetime Drift | $E_{SENSE_DRIFT}$ | — | -3 | ±1 | 3 | % |
| Total Output Error Lifetime Drift | $E_{TOT_DRIFT}$ | — | -3 | ±1 | 3 | % |

Notes: 8. Typical values with +/- are 3 sigma values.
9. Percentage of $I_P$, with $I_P = I_{PR(MAX)}$.


© 2026 Copyright Diodes Incorporated. All Rights Reserved.

## AHC1725Q-30B (Valid at $T_A$ = -40°C to +150°C, $V_{CC}$ = 3.3V, unless otherwise specified.)

| Characteristic | Symbol | Test Conditions | Min | Typ (Note 8) | Max | Unit |
|---|---|---|---|---|---|---|
| **NORMAL PERFORMANCE** | | | | | | |
| Current Sensing Range | $I_{PR}$ | — | -30 | — | 30 | A |
| Sensitivity | Sens | $I_{PR(MIN)} < I_P < I_{PR(MAX)}$ | — | 44 | — | mV/A |
| Zero-Current Output Voltage | $V_{OUT(Q)}$ | Bidirectional, $I_P$ = 0A | — | $V_{CC}$ × 0.5 | — | V |
| **ACCURACY PERFORMANCE** | | | | | | |
| Total Output Error (Note 9) | $E_{TOT}$ | $I_P = I_{PR(MAX)}$, $T_A$ = 25°C to 150°C | -2.5 | ±0.7 | 2.5 | % |
| | | $I_P = I_{PR(MAX)}$, $T_A$ = -40°C to 25°C | -6 | ±4 | 6 | % |
| Sensitivity Error | $E_{SENS}$ | $I_P = I_{PR(MAX)}$, $T_A$ = 25°C to 150°C | -2 | ±1 | 2 | % |
| | | $I_P = I_{PR(MAX)}$, $T_A$ = -40°C to 25°C | -5.5 | ±4 | 5.5 | % |
| Voltage Offset Error | $V_{OE}$ | $I_P$ = 0A, $T_A$ = 25°C to 150°C | -10 | ±3 | 10 | mV |
| | | $I_P$ = 0A, $T_A$ = -40°C to 25°C | -30 | ±5 | 30 | mV |
| **LIFETIME DRIFT CHARACTERISTICS** | | | | | | |
| Sensitivity Error Lifetime Drift | $E_{SENSE_DRIFT}$ | — | -3 | ±1 | 3 | % |
| Total Output Error Lifetime Drift | $E_{TOT_DRIFT}$ | — | -3 | ±1 | 3 | % |

## AHC1725Q-40B (Valid at $T_A$ = -40°C to +150°C, $V_{CC}$ = 3.3V, unless otherwise specified.)

| Characteristic | Symbol | Test Conditions | Min | Typ (Note 8) | Max | Unit |
|---|---|---|---|---|---|---|
| **NORMAL PERFORMANCE** | | | | | | |
| Current Sensing Range | $I_{PR}$ | — | -40 | — | 40 | A |
| Sensitivity | Sens | $I_{PR(MIN)} < I_P < I_{PR(MAX)}$ | — | 33 | — | mV/A |
| Zero-Current Output Voltage | $V_{OUT(Q)}$ | Bidirectional, $I_P$ = 0A | — | $V_{CC}$ × 0.5 | — | V |
| **ACCURACY PERFORMANCE** | | | | | | |
| Total Output Error (Note 9) | $E_{TOT}$ | $I_P = I_{PR(MAX)}$, $T_A$ = 25°C to 150°C | -2.5 | ±1 | 2.5 | % |
| | | $I_P = I_{PR(MAX)}$, $T_A$ = -40°C to 25°C | -6 | ±4 | 6 | % |
| Sensitivity Error | $E_{SENS}$ | $I_P = I_{PR(MAX)}$, $T_A$ = 25°C to 150°C | -2 | ±1 | 2 | % |
| | | $I_P = I_{PR(MAX)}$, $T_A$ = -40°C to 25°C | -5.5 | ±4 | 5.5 | % |
| Voltage Offset Error | $V_{OE}$ | $I_P$ = 0A, $T_A$ = 25°C to 150°C | -10 | ±3 | 10 | mV |
| | | $I_P$ = 0A, $T_A$ = -40°C to 25°C | -30 | ±5 | 30 | mV |
| **LIFETIME DRIFT CHARACTERISTICS** | | | | | | |
| Sensitivity Error Lifetime Drift | $E_{SENSE_DRIFT}$ | — | -3 | ±1 | 3 | % |
| Total Output Error Lifetime Drift | $E_{TOT_DRIFT}$ | — | -3 | ±1 | 3 | % |

## AHC1725Q-50B (Valid at $T_A$ = -40°C to +150°C, $V_{CC}$ = 3.3V, unless otherwise specified.)

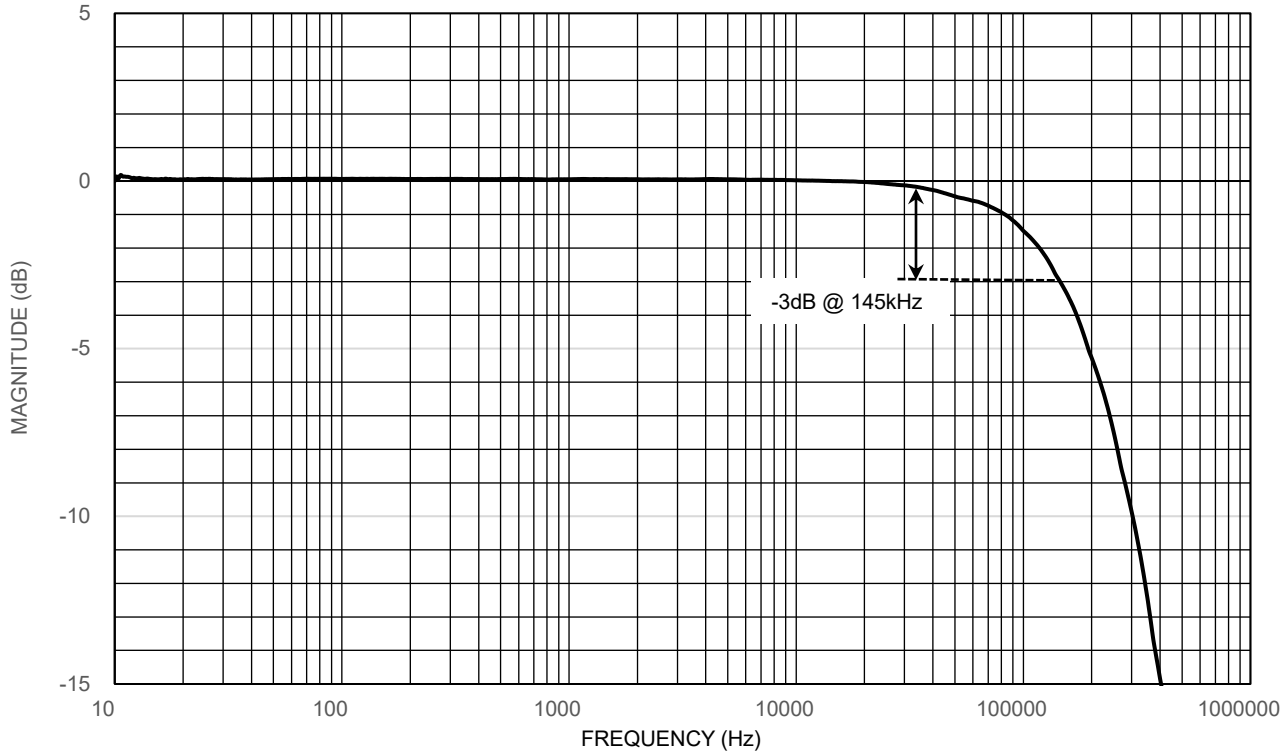
| Characteristic | Symbol | Test Conditions | Min | Typ (Note 8) | Max | Unit |
|---|---|---|---|---|---|---|
| **NORMAL PERFORMANCE** | | | | | | |
| Current Sensing Range | $I_{PR}$ | — | -50 | — | 50 | A |
| Sensitivity | Sens | $I_{PR(MIN)} < I_P < I_{PR(MAX)}$ | — | 26.4 | — | mV/A |
| Zero-Current Output Voltage | $V_{OUT(Q)}$ | Bidirectional, $I_P$ = 0A | — | $V_{CC}$ × 0.5 | — | V |
| **ACCURACY PERFORMANCE** | | | | | | |
| Total Output Error (Note 9) | $E_{TOT}$ | $I_P = I_{PR(MAX)}$, $T_A$ = 25°C to 150°C | -2.5 | ±1 | 2.5 | % |
| | | $I_P = I_{PR(MAX)}$, $T_A$ = -40°C to 25°C | -6 | ±4 | 6 | % |
| Sensitivity Error | $E_{SENS}$ | $I_P = I_{PR(MAX)}$, $T_A$ = 25°C to 150°C | -2 | ±1 | 2 | % |
| | | $I_P = I_{PR(MAX)}$, $T_A$ = -40°C to 25°C | -5.5 | ±4 | 5.5 | % |
| Voltage Offset Error | $V_{OE}$ | $I_P$ = 0A, $T_A$ = 25°C to 150°C | -10 | ±3 | 10 | mV |
| | | $I_P$ = 0A, $T_A$ = -40°C to 25°C | -30 | ±5 | 30 | mV |
| **LIFETIME DRIFT CHARACTERISTICS** | | | | | | |
| Sensitivity Error Lifetime Drift | $E_{SENSE_DRIFT}$ | — | -3 | ±1 | 3 | % |
| Total Output Error Lifetime Drift | $E_{TOT_DRIFT}$ | — | -3 | ±1 | 3 | % |

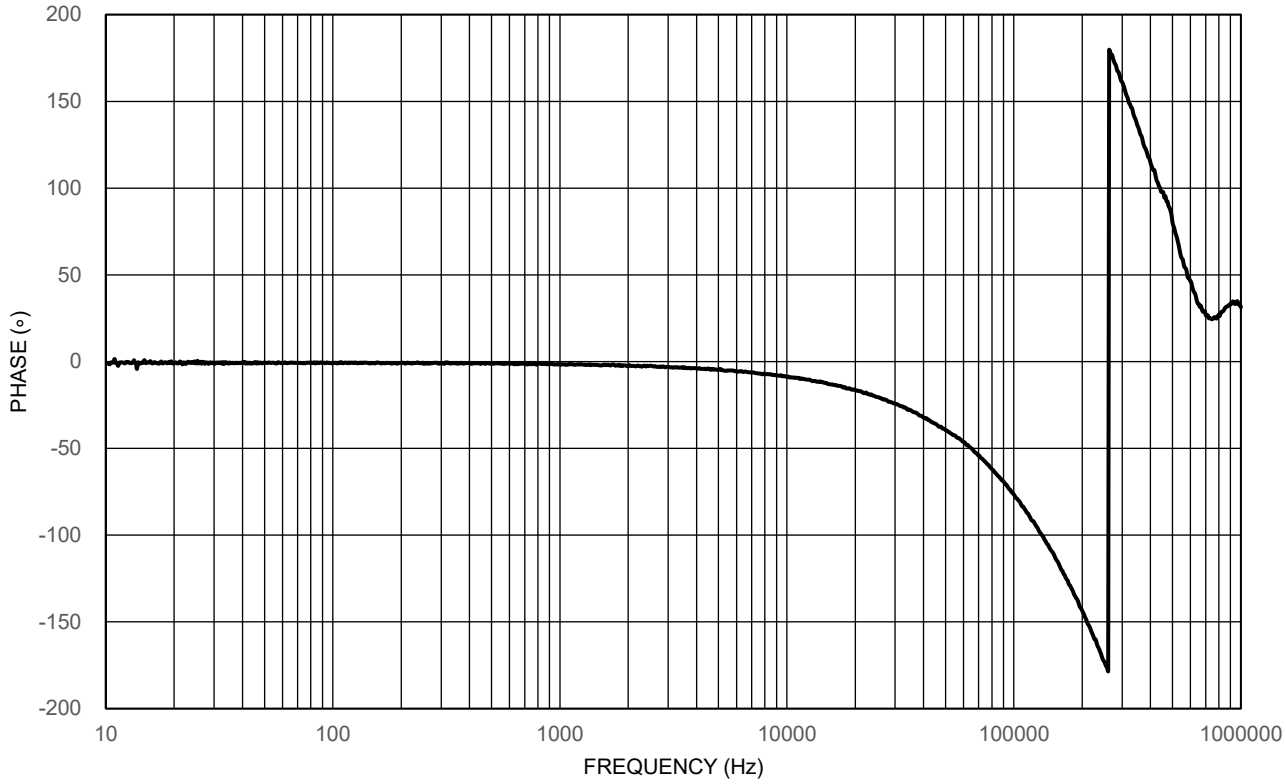
Notes: 8. Typical values with +/- are 3 sigma values.
9. Percentage of $I_P$, with $I_P = I_{PR(MAX)}$.


© 2026 Copyright Diodes Incorporated. All Rights Reserved.

## Performance Characteristics

**AHC1725Q Typical Frequency Response**





© 2026 Copyright Diodes Incorporated. All Rights Reserved.

## Response Characteristics Definitions and Performance Data

### Response Time ($t_{RESPONSE}$)

The time interval between (a) when the sensed input current reaches 90% of its final value and (b) when the sensor output reaches 90% of its full-scale value.

### Propagation Delay ($t_{PD}$)

The time interval between (a) when the sensed input current reaches 20% of its full-scale value and (b) when the sensor output reaches 20% of its full-scale value.

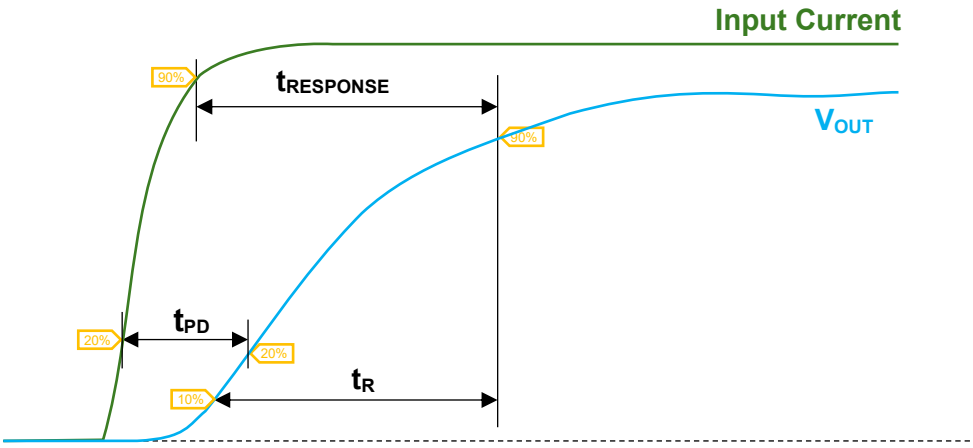
### Rise Time ($t_R$)

The time interval between (a) when the sensor reaches 10% of its full-scale value and (b) when it reaches 90% of its full-scale value.

### Response Time, Propagation Delay, Rise Time

Applied current step with 10%-90% rise time = 1µs

Test Conditions: $T_A$ = 25°C, $C_{BYPASS}$ = 0.1µF, $C_L$ = 0F





© 2026 Copyright Diodes Incorporated. All Rights Reserved.

## Power-On Functional Description and Performance Data

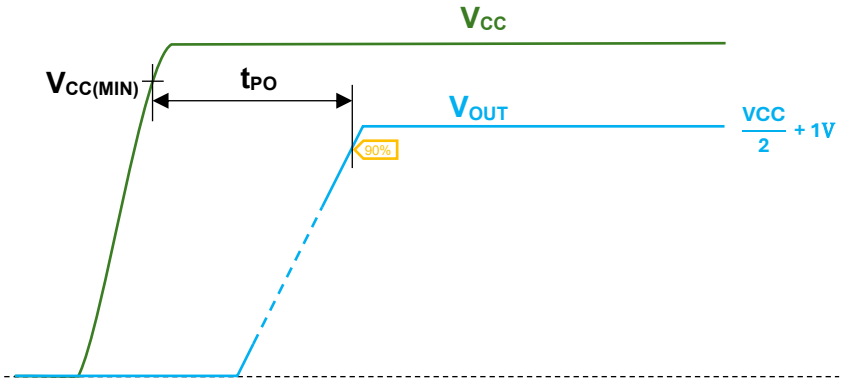
### Power-On Time ($t_{PO}$)

When the supply is ramped to its operating voltage, the device requires a finite amount of time to power its internal components before responding to an input magnetic field. Power-On Time ($t_{PO}$) is defined as the time interval between (a) when the power supply has reached its minimum specified operating voltage ($V_{CC(MIN)}$) and (b) when the sensor output has settled within ±10% of its steady-state value under an applied magnetic field.

A pull-down resistor ($R_{PD}$) was used on the output of the tested device.

### Power-On Time ($t_{PO}$)

Test Conditions: $T_A$ = 25°C, $C_{BYPASS}$ = 0.1µF, $C_F$ = 0F, $R_{PD}$ = 10kΩ
1V Output Swing





© 2026 Copyright Diodes Incorporated. All Rights Reserved.

## Application Information

### Thermal Rise vs. Primary Current

Self-heating due to the flow of current should be considered during the design of any current sensing system. The sensor, printed circuit board (PCB), and contacts to the PCB will generate heat as current moves through the system.

The thermal response is highly dependent on PCB layout, copper thickness, cooling techniques, and the profile of the injected current. The current profile includes peak current, current “on-time”, and duty cycle. While the data presented in this section was collected with Direct-Current (DC), these numbers may be used to approximate thermal response for both AC signals and current pulses.

The plot in Figure 1 shows the measured rise in steady-state die temperature of the AHC1725Q versus continuous current at an ambient temperature, $T_A$, of +25°C. The thermal offset curves may be directly applied to other values of $T_A$. Conversely, Figure 2 shows the maximum continuous current at a given $T_A$. Surges beyond the maximum current listed in Figure 2 are allowed given the maximum junction temperature, $T_{J(MAX)}$ (+165°C), is not exceeded.

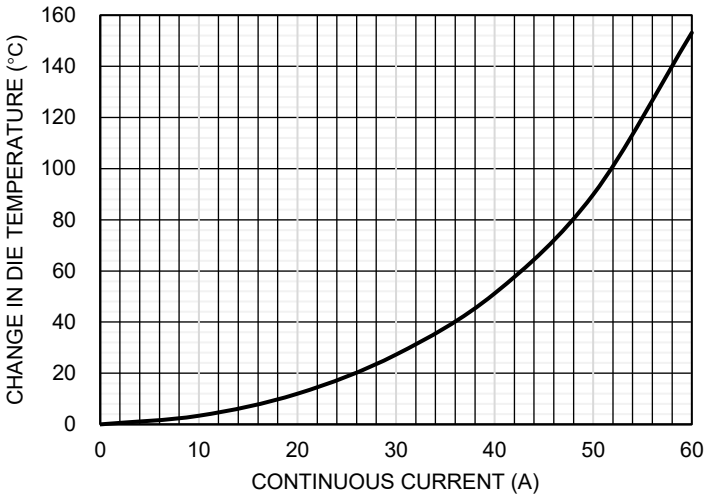



Figure 1. Self-Heating in the SO-8 (Type CJ2) Due to Current Flow

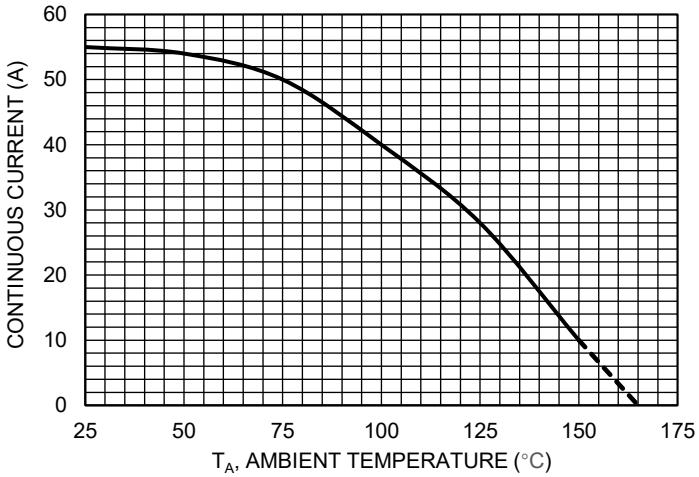



Figure 2. Maximum Continue Current at $T_A$

The thermal capacity of the AHC1725Q should be verified by the end user in the application’s specific conditions. The maximum junction temperature, $T_{J(MAX)}$ (+165°C), should not be exceeded.


© 2026 Copyright Diodes Incorporated. All Rights Reserved.

## Application Information (continued)

### Evaluation Board Layout

Thermal data shown in Figure 3 was collected using the AHCEVB-SO8 Evaluation Board (TDBH0203). This board includes 1700mm$^2$ of 4oz. copper (0.1388mm) connected to pins 1 and 2, and to pins 3 and 4, with thermal vias connecting the layers. Top and bottom layers of the PCB are shown below in Figure 3.

Gerber files for the evaluation board are available for download from the Diodes website. Please see the technical documents section on the device webpage.

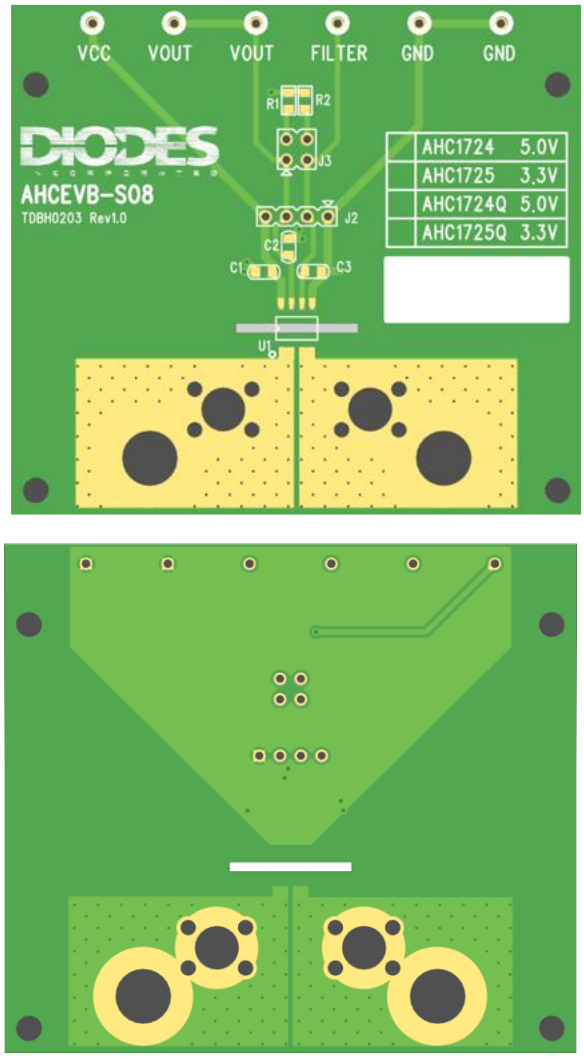



Figure 3. Top and Bottom Layers of PCB


© 2026 Copyright Diodes Incorporated. All Rights Reserved.

## Definitions of Accuracy Characteristics

### Sensitivity (Sens)

The change in sensor IC output in response to a 1A change through the primary conductor. The sensitivity is the product of the magnetic circuit sensitivity (G/A) (1G = 0.1mT) and the linear IC amplifier gain (mV/G). The linear IC amplifier gain is programmed at the factory to optimize the sensitivity (mV/A) for the full-scale current of the device.

### Sensitivity Error ($E_{SENS}$)

Sensitivity error refers to the percentage deviation between the actual measured sensitivity and the ideal sensitivity.

$$E_{SENS} = \frac{SENS_{Meas(VCC)} - SENS_{Ideal(VCC)}}{Sens_{ideal(VCC)}} \times 100(\%)$$

### Sensitivity Temperature Drift ($E_{SENS_DRIFT}$)

Over the entire operating temperature drift is defined as:

$$E_{SENS_drift} = \frac{SENS_{Meas(TA)} - SENS_{Ideal(25℃)}}{Sens_{ideal(25℃)}} \times 100(\%)$$

### Nonlinearity ($E_{LIN}$)

The nonlinearity is a measure of how linear the output of the sensor IC is over the full current measurement range. The nonlinearity is calculated as:

$$E_{LIN} = \left\{1 - \left[\frac{V_{OUT}\,(I_{PR(max)} - V_{OUT(Q)})}{2 \times \left(V_{OUT}\left(\frac{I_{PR(\max)}}{2}\right) - V_{OUT(Q)}\right)}\right]\right\} \times 100(\%)$$

where $V_{OUT}(I_{PR(MAX)})$ is the output of the sensor IC with the maximum measurement current flowing through it and $V_{OUT}(I_{PR(MAX)}/2)$ is the output of the sensor IC with half of the maximum measurement current flowing through it.

### Zero-Current Output Voltage ($V_{OUT(Q)}$)

The output of the sensor when the primary current is zero. For a unipolar supply voltage, it nominally remains at 0.5 × $V_{CC}$ for a bidirectional device and 0.1 × $V_{CC}$ for a unidirectional device. For example, in the case of a bidirectional output device, $V_{CC}$ = 3.3V translates into $V_{OUT(Q)}$ = 1.65V. Variation in $V_{OUT(Q)}$ can be attributed to the resolution of the Diodes linear IC quiescent voltage trim and thermal drift.

### Voltage Offset Error ($V_{OE}$)

The deviation of the device output from its ideal quiescent value of 0.5 × $V_{CC}$ (bidirectional) or 0.1 × $V_{CC}$ (unidirectional) due to nonmagnetic causes. To convert this voltage to amperes, divide by the device sensitivity, Sens.

### Voltage Offset Temperature Drift ($V_{OE_DRIFT}$)

Due to internal circuit tolerances and heat dissipation, the static output voltage may shift with the operating temperature. Operating temperature drift is defined as:

$$V_{OE_drift} = \frac{V_{OUT(QTA)} - V_{OUT(Q25℃)}}{V_{OUT(Q25℃)}} \times 100(\%)$$


© 2026 Copyright Diodes Incorporated. All Rights Reserved.

## Definitions of Accuracy Characteristics (continued)

### Total Output Error ($E_{TOT}$)

The difference between the current measurement from the sensor IC and the actual current ($I_P$), relative to the actual current. This is equivalent to the difference between the ideal output voltage and the actual output voltage, divided by the ideal sensitivity, relative to the current flowing through the primary conduction path:

$$E_{TOT}(I_P) = \frac{V_{OUT_{ideal}}(I_P) - V_{OUT}(I_P)}{Sens_{ideal}(I_P) \times I_P} \times 100(\%)$$

The Total Output Error incorporates all sources of error and is a function of $I_P$. At relatively high currents, $E_{TOT}$ will be mostly due to sensitivity error, and at relatively low currents, $E_{TOT}$ will be mostly due to Voltage Offset Error ($V_{OE}$). In fact, at $I_P$ = 0A, $E_{TOT}$ approaches infinity due to the offset. This is illustrated in Figure 4 and Figure 5. Figure 4 shows a distribution of output voltages versus $I_P$ at +25°C and across temperature. Figure 5 shows the corresponding $E_{TOT}$ versus $I_P$.

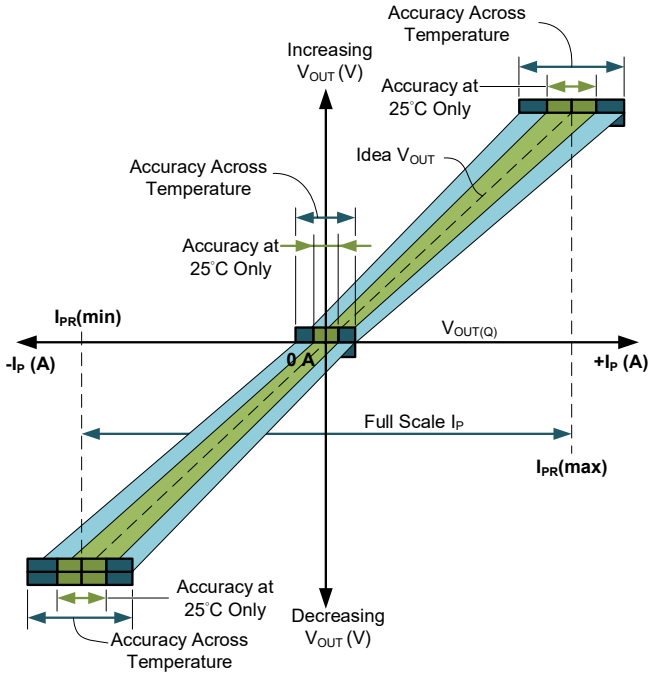



Figure 4. Output Error versus Sensed Current


© 2026 Copyright Diodes Incorporated. All Rights Reserved.

## Definitions of Accuracy Characteristics (continued)

**Total Output Error ($E_{TOT}$)** (continued)

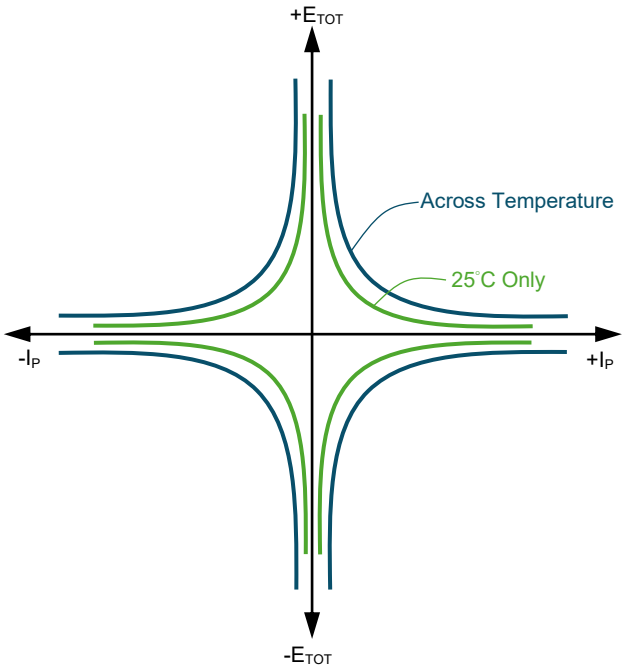



Figure 5. Total Output Error versus Sensed Current

### Sensitivity Ratiometry Coefficient (SENS_RAT_COEF)

The coefficient defining how the sensitivity scales with $V_{CC}$. The ideal coefficient is 1, meaning the sensitivity scales proportionally with $V_{CC}$. A 10% increase in $V_{CC}$ results in a 10% increase in sensitivity. A coefficient of 1.1 means that the sensitivity increases by 10% more than the ideal proportionality case. This means that a 10% increase in $V_{CC}$ results in an 11% increase in sensitivity. This relationship is described by the following equation:

$$Sens(V_{CC}) = Sens(V)\left[1 + \frac{(V_{CC} - 3.3V) \times SENS_RAT_COFE}{3.3V}\right]$$

This can be rearranged to define the sensitivity ratiometry coefficient as:

$$SENS_RAT_COEF = \left[\frac{Sens(V_{CC})}{Sens(3.3V)} - 1\right] \times \frac{3.3V}{(V_{CC} - 3.3V)}$$

### Zero-Current Output Ratiometry Coefficient (QVO_RAT_ COEF)

The coefficient defining how the zero-current output voltage scales with $V_{CC}$. The ideal coefficient is 1, meaning the output voltage scales proportionally with $V_{CC}$, always being equal to $V_{CC}/2$. A coefficient of 1.1 means that the zero-current output voltage increases by 10% more than the ideal proportionality case. This means that a 10% increase in $V_{CC}$ results in an 11% increase in the zero-current output voltage. This relationship is described by the following equation:

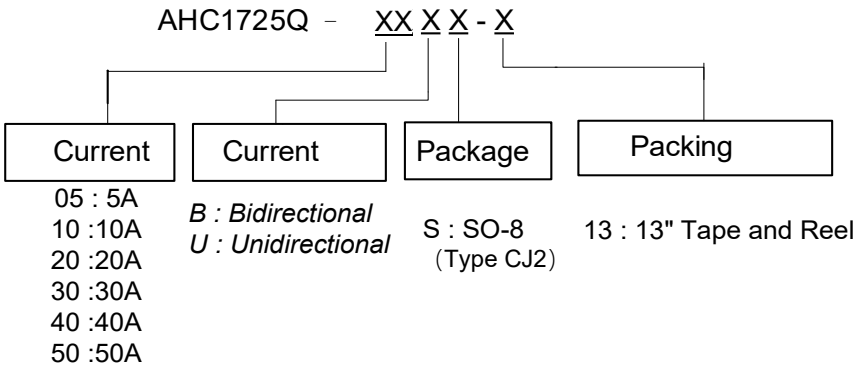
$$VOUTQ(V_{CC}) = VOUTQ(3.3V)\left[1 + \frac{(V_{CC} - 3.3V) \times QVO_RAT_COEF}{3.3V}\right]$$

This can be rearranged to define the zero-current output ratiometry coefficient as:

$$QVO_RAT_COEF = \left[\frac{VOUTQ(V_{CC})}{VOUTQ(3.3V)} - 1\right] \times \frac{3.3V}{(V_{CC} - 3.3V)}$$


© 2026 Copyright Diodes Incorporated. All Rights Reserved.

## Ordering Information (Note 10)

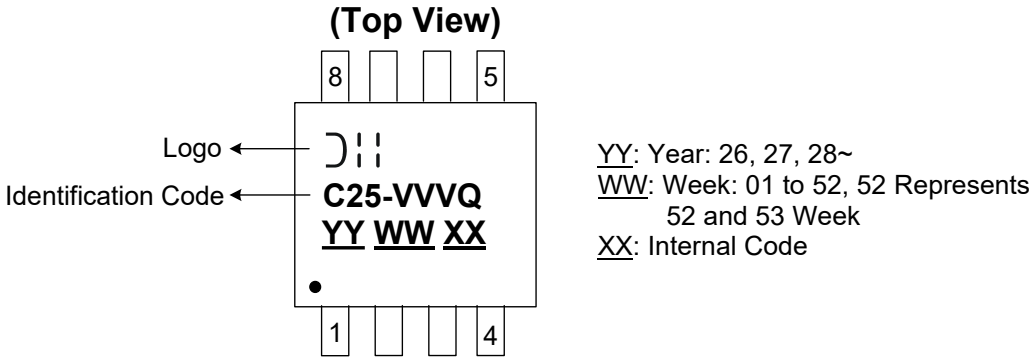



| Orderable Part Number | Package Code | Package | Packing | |
|---|---|---|---|---|
| | | | Qty. | Carrier |
| AHC1725Q-05BS-13 | S | SO-8 (Type CJ2) | 4000 | 13” Tape & Reel |
| AHC1725Q-10US-13 | S | SO-8 (Type CJ2) | 4000 | 13” Tape & Reel |
| AHC1725Q-10BS-13 | S | SO-8 (Type CJ2) | 4000 | 13” Tape & Reel |
| AHC1725Q-20US-13 | S | SO-8 (Type CJ2) | 4000 | 13” Tape & Reel |
| AHC1725Q-20BS-13 | S | SO-8 (Type CJ2) | 4000 | 13” Tape & Reel |
| AHC1725Q-30US-13 | S | SO-8 (Type CJ2) | 4000 | 13” Tape & Reel |
| AHC1725Q-30BS-13 | S | SO-8 (Type CJ2) | 4000 | 13” Tape & Reel |
| AHC1725Q-40BS-13 | S | SO-8 (Type CJ2) | 4000 | 13” Tape & Reel |
| AHC1725Q-50BS-13 | S | SO-8 (Type CJ2) | 4000 | 13” Tape & Reel |

Note: 10. For packaging details, go to our website at https://www.diodes.com/design/support/packaging/diodes-packaging/.


© 2026 Copyright Diodes Incorporated. All Rights Reserved.

## Marking Information



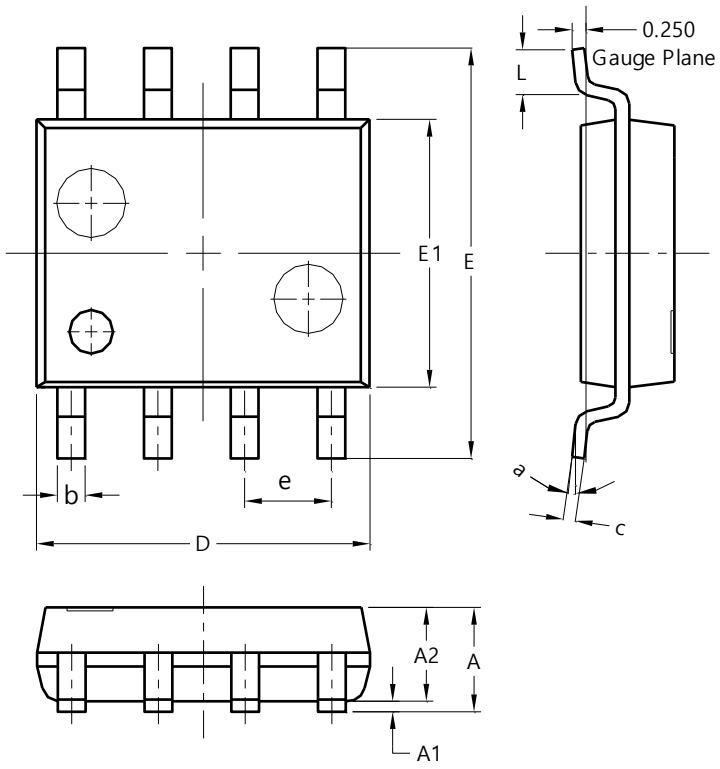

| Orderable Part Number | Package | Identification Code |
|---|---|---|
| AHC1725Q-05BS-13 | SO-8 (Type CJ2) | C25-05BQ |
| AHC1725Q-10US-13 | SO-8 (Type CJ2) | C25-10UQ |
| AHC1725Q-10BS-13 | SO-8 (Type CJ2) | C25-10BQ |
| AHC1725Q-20US-13 | SO-8 (Type CJ2) | C25-20UQ |
| AHC1725Q-20BS-13 | SO-8 (Type CJ2) | C25-20BQ |
| AHC1725Q-30US-13 | SO-8 (Type CJ2) | C25-30UQ |
| AHC1725Q-30BS-13 | SO-8 (Type CJ2) | C25-30BQ |
| AHC1725Q-40BS-13 | SO-8 (Type CJ2) | C25-40BQ |
| AHC1725Q-50BS-13 | SO-8 (Type CJ2) | C25-50BQ |


© 2026 Copyright Diodes Incorporated. All Rights Reserved.

## Package Outline Dimensions

Please see http://www.diodes.com/package-outlines.html for the latest version.

**SO-8 (Type CJ2)**



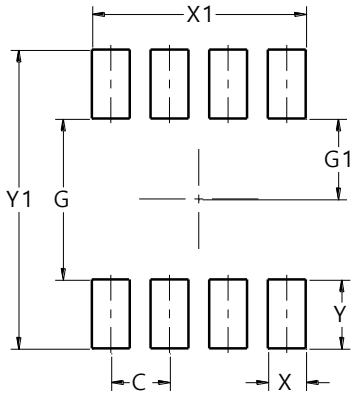

| SO-8 (Type CJ2) | | | |
|---|---|---|---|
| **Dim** | **Min** | **Max** | **Typ** |
| **A** | 1.450 | 1.750 | -- |
| **A1** | 0.100 | 0.250 | -- |
| **A2** | 1.350 | 1.550 | -- |
| **b** | 0.330 | 0.510 | -- |
| **c** | 0.170 | 0.250 | -- |
| **D** | 4.700 | 5.100 | -- |
| **E** | 5.800 | 6.200 | -- |
| **E1** | 3.800 | 4.000 | -- |
| **e** | 1.27 BSC | | |
| **L** | 0.400 | 1.270 | -- |
| **A** | 0° | 8° | -- |
| **All Dimensions in mm** | | | |


© 2026 Copyright Diodes Incorporated. All Rights Reserved.

## Suggested Pad Layout

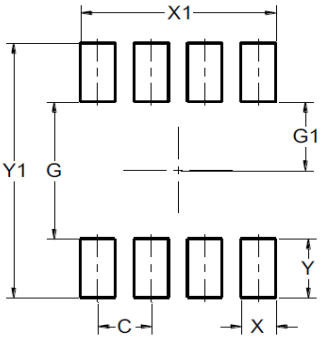
Please see http://www.diodes.com/package-outlines.html for the latest version.

**SO-8 (Type CJ2)**

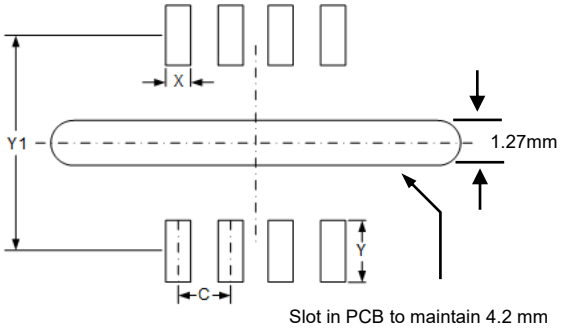



| Dimensions | Value (in mm) |
|---|---|
| **C** | 1.270 |
| **G** | 3.500 |
| **G1** | 1.750 |
| **X** | 0.820 |
| **X1** | 4.630 |
| **Y** | 1.500 |
| **Y1** | 6.500 |

PCB Layout Reference View 1




PCB Layout Reference View 2




Slot in PCB to maintain 4.2 mm creepage once part is on PCB.

**For PCB assemblies that cannot support a slotted design, the above stretched footprint**

## Mechanical Data

- Moisture Sensitivity: Level 1 per J-STD-020
- Terminals: Finish – Matte Tin Plated Leads. Solderable per MIL-STD-202, Method 208 e3
- Weight: 0.008 grams (Approximate)


© 2026 Copyright Diodes Incorporated. All Rights Reserved.

**IMPORTANT NOTICE**

1. DIODES INCORPORATED (Diodes) AND ITS SUBSIDIARIES MAKE NO WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, WITH REGARDS TO ANY INFORMATION CONTAINED IN THIS DOCUMENT, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT OF THIRD PARTY INTELLECTUAL PROPERTY RIGHTS (AND THEIR EQUIVALENTS UNDER THE LAWS OF ANY JURISDICTION).

2. The Information contained herein is for informational purpose only and is provided only to illustrate the operation of Diodes' products described herein and application examples. Diodes does not assume any liability arising out of the application or use of this document or any product described herein. This document is intended for skilled and technically trained engineering customers and users who design with Diodes' products. Diodes' products may be used to facilitate safety-related applications; however, in all instances customers and users are responsible for (a) selecting the appropriate Diodes products for their applications, (b) evaluating the suitability of Diodes' products for their intended applications, (c) ensuring their applications, which incorporate Diodes' products, comply the applicable legal and regulatory requirements as well as safety and functional-safety related standards, and (d) ensuring they design with appropriate safeguards (including testing, validation, quality control techniques, redundancy, malfunction prevention, and appropriate treatment for aging degradation) to minimize the risks associated with their applications.

3. Diodes assumes no liability for any application-related information, support, assistance or feedback that may be provided by Diodes from time to time. Any customer or user of this document or products described herein will assume all risks and liabilities associated with such use, and will hold Diodes and all companies whose products are represented herein or on Diodes' websites, harmless against all damages and liabilities.

4. Products described herein may be covered by one or more United States, international or foreign patents and pending patent applications. Product names and markings noted herein may also be covered by one or more United States, international or foreign trademarks and trademark applications. Diodes does not convey any license under any of its intellectual property rights or the rights of any third parties (including third parties whose products and services may be described in this document or on Diodes' website) under this document.

5. Diodes' products are provided subject to Diodes' Standard Terms and Conditions of Sale (https://www.diodes.com/about/company/terms-and-conditions/terms-and-conditions-of-sales/) or other applicable terms. This document does not alter or expand the applicable warranties provided by Diodes. Diodes does not warrant or accept any liability whatsoever in respect of any products purchased through unauthorized sales channel.

6. Diodes' products and technology may not be used for or incorporated into any products or systems whose manufacture, use or sale is prohibited under any applicable laws and regulations. Should customers or users use Diodes' products in contravention of any applicable laws or regulations, or for any unintended or unauthorized application, customers and users will (a) be solely responsible for any damages, losses or penalties arising in connection therewith or as a result thereof, and (b) indemnify and hold Diodes and its representatives and agents harmless against any and all claims, damages, expenses, and attorney fees arising out of, directly or indirectly, any claim relating to any noncompliance with the applicable laws and regulations, as well as any unintended or unauthorized application.

7. While efforts have been made to ensure the information contained in this document is accurate, complete and current, it may contain technical inaccuracies, omissions and typographical errors. Diodes does not warrant that information contained in this document is error-free and Diodes is under no obligation to update or otherwise correct this information. Notwithstanding the foregoing, Diodes reserves the right to make modifications, enhancements, improvements, corrections or other changes without further notice to this document and any product described herein. This document is written in English but may be translated into multiple languages for reference. Only the English version of this document is the final and determinative format released by Diodes.

8. Any unauthorized copying, modification, distribution, transmission, display or other use of this document (or any portion hereof) is prohibited. Diodes assumes no responsibility for any losses incurred by the customers or users or any third parties arising from any such unauthorized use.

9. This Notice may be periodically updated with the most recent version available at https://www.diodes.com/about/company/terms-and-conditions/important-notice

The Diodes logo is a registered trademark of Diodes Incorporated in the United States and other countries.
All other trademarks are the property of their respective owners.
© 2026 Diodes Incorporated. All Rights Reserved.

**www.diodes.com**


© 2026 Copyright Diodes Incorporated. All Rights Reserved.