Product Overview

NCS210R: Current Sense Amplifier, 26V, Low-/High-Side Voltage Out, Bidirectional Current Shunt Monitor

For complete documentation, see the data sheet.

The NCS210R and NCV210R (AEC- Q100 qualified) are voltage output current sense amplifiers that can measure voltage across shunts at common-mode voltages from -0.3 V to 26 V, independent of supply voltage. With a fixed gain of 200 V/V, the low offset of the zero-drift architecture enables current sensing with maximum drops across the shunt as low as 10 mV full-scale. These devices can operate from a single +2.2 V to +26 V power supply, drawing a maximum of 80 µA of supply current. Available in UQFN and SC70 packages
Additional gain options are available:
NCS213R (50 V/V), NCS214R (100 V/V), NCS211R (500 V/V)

<b style="font-size:14px)Similar Products:

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<td style="border-bottom: 1px dotted black;)Gain (V/V)</td>
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<td style="border-bottom: 1px dotted black;)Gain Error (%)</td>
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<td style="border-bottom: 1px dotted black;)Offset Voltage (µV)</td>
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Features

- Wide common mode input range -0.3 to 26 V
- Low Offset Voltage: ±35 µV max.
- Low Offset Drift: 0.5 µV/°C max.
- Supply Voltage: 2.2 to 26V

Benefits

- High- side current sensing for high voltage systems
- Low Ohm value current sense resistors
- High accuracy over temperature leading to better power efficiency
- Wide supply voltage range provides system flexibilty

Applications

- Power Monitoring
- Power Adapters
- LED Power Supply
- Over Current Protection
- Automotive

End Products

- White Goods
- Automotive
- Lighting
- Laptop/Notebooks PC
- Fast Chargers in Smartphones and Tablets

Part Electrical Specifications

Product	Compliance	Status	Channels	Gain (V/V)	Gain Error Max (%)	V_s Min (V)	V_s Max (V)	V_{CM} (V)	I_q Typ (mA)	Bandwidth Typ (-3dB)	V_{os} Max (mV)	V_{os} Drift Max (µV/°C)	Operating Temperature Range (°C)	CMRR Typ (dB)	Package Type
NCS210RMUTAG	Pb-free Halide free	Active	1	200	±1	2.2	26	-0.3 to 26	0.04	0.04	±0.035	0.5	-40 to 125	125	UQFN-10
NCS210RSQT2G	Pb-free Halide free	NEW	1	200	±1	2.2	26	-0.3 to 26	0.04	0.04	±0.035	0.5	-40 to 125	125	SC-88-6 / SC-70-6 / SOT-363-6
NCV210RSQT2G	AEC Qualified PPAP Capable Pb-free Halide free	NEW	1	200	±1.5	2.2	26	-0.3 to 26	0.04	0.04	±0.05	1.5	-40 to 125	135	SC-88-6 / SC-70-6 / SOT-363-6

For more information please contact your local sales support at www.onsemi.com.

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