Automotive, 125°C operation, 5.5V input, 300mA linear regulator

S-19255 Series





The industry's smallest* package and high PSRR minimize automotive camera modules!

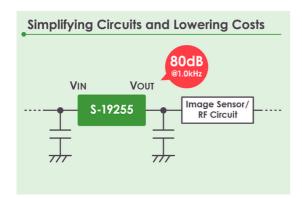


The industry's smallest* package minimizes camera modules.

S-19255 Series comes in a 1.0mm square **HSNT-4(1010)B**, **the industry's smallest* package**. The use of HSNT-4(1010)B package with outer leads facilitates mounting, ensures high mounting strength and permits automated visual inspections after mounting.

S-19255 Series accommodates the demand for smaller camera modules to enable installation of the evergrowing number of camera modules that systems such as Advanced Driver Assistance (ADAS) and Autonomous Driving (AD) require.

*Based on our research as of February 2022



High PSRR over a wide frequency range simplifies circuits and lowers costs

S-19255 Series provides high PSRR over a wide frequency range with a rejection rate of **80dB typ.** (**f** = **1.0kHz**) and 50dB (**f** = 100kHz). This means that it requires no circuits to reduce noise, which simplifies circuits and lowers costs.

S-19255 Series delivers clean power supply with little noise, which is ideal for automotive cameras and transmission RF circuits.

PSRR: Power Supply Ripple Rejection



Use of Small I/O Capacitors further minimizes overall footprints

S-19255 Series permits use of $0.1\mu F$ input capacitors and $1.0\mu F$ output capacitors.

Small and readily available capacitors can be used instead of large capacitors to **easily minimize the overall footprints**.

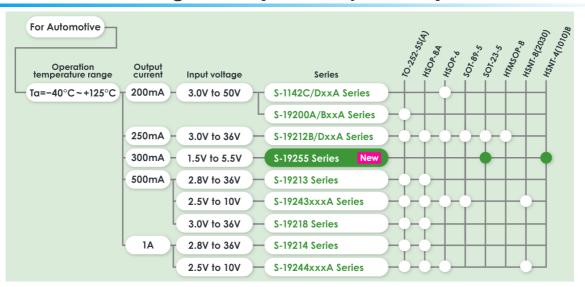
ABLIC Inc.



Applications

	Applicable package	
	HSNT-4(1010)B	SOT-23-5
Surround view camera	~	v
Front sensing camera, DMS, FCW	-	v
Accessory, car navigation system, car audio system, etc.	V	V
Engine, transmission, suspension, ABS, related-devices for EV / HEV / PHEV, etc.	-	V
Constant-voltage power supply for electrical application for vehicle interior	V	V

Automotive Linear Regulators (125°C Operation) Product Lineup



Features

Product name	S-19255 Series
	Automotive
Output current	300mA
Output voltage	0.9V to 3.6V
Input voltage	1.5V to 5.5V
Output voltage accuracy	±2.0% (Tj = -40°C to +125°C)
Ripple rejection	50dB typ. $(V_{OUT(S)} = 3.3V, f = 100kHz)$ 80dB typ. $(V_{OUT(S)} = 3.3V, f = 1.0kHz)$
Package	SOT-23-5, HSNT-4(1010)B
Automotive quality	AEC-Q100 qualified, PPAP capable
Operation temperature range	Ta=-40°C to +125°C

As of 2/1, 2023. All the information described herein is subject to change without notice.

