# Product Overview

## NSS40201L: Low $V_{CE(sat)}$ Transistor, NPN, 40 V, 2.0 A

For complete documentation, see the data sheet.

Low VCE(sat) Bipolar Transistors are miniature surface mount devices featuring ultra low saturation voltage VCE(sat) and high current gain capability. These are designed for use in low voltage, high speed switching applications where affordable efficient energy control is important.

## Features

- High Current, Low VCE(sat), ESD Robust, High Current Gain, High Cut Off Frequency, Low Profile Package, Linear Gain (Beta)
- NSV Prefix for Automotive and Other Applications Requiring Unique Site and Control Change Requirements; AECQ101 Qualified and PPAP Capable

## Benefits

- Improved Circuit Efficiency, Decreased Battery Charge Time, Reduce component count, High Frequency Switching, Smaller Portable Product, No distortion

## Applications

- Load Switching, Battery Charging, External Pass Transistor, DC/DC Converter, Complimentary Driver, Current Extention & Low Drop Out Regulation, Cathode Florescent Lamp drive, Peripheral Driver - LEDs, Motors, Relays

## Part Electrical Specifications

| Product | Pricing ($/Unit) | Compliance | Status | Polarity | Type | $V_{CE(sat)}$ Max (V) | $I_C$ Cont. (A) | $V_{CEO}$ Min (V) | $V_{CBO}$ (V) | $V_{EBO}$ (V) | $V_{BE(sat)}$ (V) | $V_{BE(on)}$ (V) | $h_{FE}$ Min | $h_{FE}$ Max | $f_T$ Min (MHz) | $P_{TM}$ Max (W) | Package Type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NSS40201LT1G | 0.108 | Pb-free<br>Halide free<br>non AEC-Q and PPAP | Active | NPN | Low $V_{CE(sat)}$ | 0.06 | 2 | 40 | 40 | 6 | 0.9 | 0.9 | 200 | - | 150 | 0.54 | SOT-23-3 |
| NSV40201LT1G | 0.1481 | AEC Qualified<br>PPAP Capable<br>Pb-free<br>Halide free | Active | NPN | Low $V_{CE(sat)}$ | 0.06 | 2 | 40 | 40 | 6 | 0.9 | 0.9 | 200 | - | 150 | 0.54 | SOT-23-3 |

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

**Created on: 4/18/2021**