



## Product Overview

### NSS40302PD: Low $V_{CE(sat)}$ Transistor, Complementary, 40 V, 6.0 A

For complete documentation, see the data sheet

#### Product Description

ON Semiconductor's e2PowerEdge family of Low  $V_{CE(sat)}$  Bipolar Transistors are surface mount devices featuring ultra low saturation voltage  $V_{CE(sat)}$  and high current gain capability. These are designed for use in low voltage, high speed switching applications where affordable efficient energy control is important. Typical applications are low voltage motor controls in mass storage products such as disc drives and tape drives. In the automotive industry they can be used in air bag deployment and in the instrument cluster. The high current gain allows e2PowerEdge devices to be driven directly from PMU's control outputs, and the Linear Gain (Beta) makes them ideal components in analog amplifiers.

#### Features

- High Current, Low  $V_{CE(sat)}$ , ESD Robust, High Current Gain, High Cut Off Frequency, Low Profile Package, Linear Gain (Beta)

#### 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 Extension & Low Drop Out Regulation, Cathode Florescent Lamp drive, Peripheral Driver - LEDs, Motors, Relays

#### End Products

- Mobile Phones, PDAs, MP3 players, Computers, Power Supplies, Automotive Body Electronics, Toys.

#### Part Electrical Specifications

Product	Compliance	Status	Polarity	$I_C$ Continuous (A)	$V_{(BR)CEO}$ Min (V)	$V_{CE(sat)}$ Max (V)	$h_{FE}$ Min	$h_{FE}$ Max	$f_T$ Min (MHz)	$P_{TM}$ Max (W)	Package Type
NSS40302PDR2G	AEC Qualified Pb-free Halide free	Active	Complementary	3	40	0.06	200	-	100	0.576	SOIC-8
NSV40302PDR2G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Complementary	3	40	0.06	200	-	100	0.576	SOIC-8

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