

Product Overview

NSS40501UW3: Low $V_{CE(sat)}$ Transistor, NPN, 40 V, 5.0 A

For complete documentation, see the data sheet.

ON Semiconductor e2 PowerEdge family of Low $V_{CE(sat)}$ Bipolar Transistors are miniature 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 DC-DC converters and power management in portable and battery powered products such as cellular and cordless phones, PDAs, computers, printers, digital cameras and MP3 players. Other 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 PMUs 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 Extention & Low Drop Out Regulation, Cathode Florescent Lamp drive, Peripheral Driver - LEDs, Motors, Relays

Part Electrical Specifications

Product	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
NSS40501UW3T2G	Pb-free	Active	NPN	Low $V_{CE(sat)}$	0.045	5	40	40	6	0.9	0.9	250	-	150	1.5	WDF N-3
	Halide free															
NSV40501UW3T2G	AEC Qualified PPAP Capable Pb-free Halide free	Active	NPN	Low $V_{CE(sat)}$	0.045	5	40	40	6	0.9	0.9	250	-	150	1.5	WDF N-3

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

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