



## Product Overview

### NTHC5513: Power MOSFET 20V 3.9A 80 mOhm Complementary ChipFET

For complete documentation, see the data sheet

#### Product Description

This complementary (N and P Channel) device was designed with a small footprint package and ON Semiconductor's leading low RDS(on) technology for increased circuit efficiency. The performance is ideally suited for portable or handheld applications.

#### Features

- Small Size, 40% Smaller than TSOP-6 Package
- Leadless SMD Package Featuring Complementary Pair
- ChipFET™ Package Provides Great Thermal Characteristics Similar to Larger Packages
- Low RDS(on) in a ChipFET™ Package for High Efficiency Performance
- Low Profile (< 1.1 mm) Allows Placement in Extremely Thin Environments such as Portable Electronics
- Complementary N Channel and P Channel MOSFET

#### Applications

- Load Switch Applications Requiring Level Shift
- DC-DC Conversion Circuits
- Drives Small Brushless DC Motors
- Designed for Power Management Applications in Portable and Battery Power Products

#### Part Electrical Specifications

Product	Compliance	Status	Channel Polarity	Configuration	$V_{DS(sat)}$ Min (V)	$V_{GS}$ Max (V)	$V_{GS(th)}$ Max (V)	$I_D$ Max (A)	$P_D$ Max (W)	$r_{DS(on)}$ Max @ $V_{GS} = 2.5V$ (m)	$r_{DS(on)}$ Max @ $V_{GS} = 4.5V$ (m)	$r_{DS(on)}$ Max @ $V_{GS} = 10V$ (m)	$Q_g$ Typ @ $V_{GS} = 4.5V$ (nC)	$Q_g$ Typ @ $V_{GS} = 10V$ (nC)	$Q_{gd}$ Typ @ $V_{GS} = 4.5V$ (nC)	$Q_{rr}$ Typ (nC)	$C_{iss}$ Typ (pF)	$C_{oss}$ Typ (pF)	$C_{rss}$ Typ (pF)	Package Type
NTHC5513T1G	Pb-free Halide free	Active	Complementary	Dual	20	12	1.2	3.9	2.1	115	80		4		0.7	6	180	80	25	ChipFET-8

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