

## Product Overview

### NTMFSC004N08MC: N-Channel Dual Cool™ 56 PowerTrench® MOSFET 80V, 4.0A, 4.0mΩ

For complete documentation, see the data sheet.

This N-Channel MOSFET is produced using ON Semiconductor's advanced Power Trench® process. Advancements in both silicon and Dual Cool™ package technologies have been combined to offer the lowest  $r_{DS(on)}$  while maintaining excellent switching performance by extremely low Junction-to-Ambient thermal resistance.

#### Features

- Dual Cool™ Top Side Cooling PQFN package
- High performance technology for extremely low  $r_{DS(on)}$
- Max  $r_{DS(on)} = 4.0 \text{ m}\Omega$  at  $V_{GS} = 10 \text{ V}$ ,  $I_D = 44 \text{ A}$
- Max  $r_{DS(on)} = 8.5 \text{ m}\Omega$  at  $V_{GS} = 6 \text{ V}$ ,  $I_D = 22 \text{ A}$
- 100% UIL Tested
- RoHS Compliant

#### Applications

- Synchronous rectifier
- Primary mosfet on 48V isolated Converter

#### Benefits

- improved thermals
- low conduction and switching losses

#### End Products

- AC-DC Power Supply
- Isolated DC-DC Converter

### Part Electrical Specifications

Product	Pricing (\$/Unit)	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 @ $V_{GS} = 2.5 \text{ V}$ (mΩ)	$R_{DS(on)}$ Max @ $V_{GS} = 4.5 \text{ V}$ (mΩ)	$R_{DS(on)}$ Max @ $V_{GS} = 10 \text{ V}$ (mΩ)	$Q_g$ Typ @ $V_{GS} = 4.5 \text{ V}$ (nC)	$Q_g$ Typ @ $V_{GS} = 10 \text{ V}$ (nC)	$C_{iss}$ Typ (pF)	Package Type
NTMFSC004N08MC	1.06	Pb-free	Active	N-Channel	Single	80	20	4	136	—	—	—	4	—	43.4	2980	DFN-8

For more information please contact your local sales support at [www.onsemi.com](http://www.onsemi.com).

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