

## Product Overview

### FDMS7658AS: N-Channel PowerTrench® SyncFET™ 30V, 176A, 1.9mΩ

For complete documentation, see the data sheet.

The FDMS7658AS has been designed to minimize losses in power conversion application. Advancements in both silicon and package technologies have been combined to offer the lowest  $rDS(on)$  while maintaining excellent switching performance. This device has the added benefit of an efficient monolithic Schottky body diode.

### Features

- Max  $rDS(on)$  = 1.9 mΩ at  $V_{GS} = 10$  V,  $I_D = 28$  A
- Max  $rDS(on)$  = 2.2 mΩ at  $V_{GS} = 7$  V,  $I_D = 26$  A
- Advanced Package and Silicon combination for low  $rDS(on)$  and high efficiency
- SyncFET Schottky Body Diode
- MSL1 robust package design
- 100% UIL tested
- RoHS Compliant

### Applications

- This product is general usage and suitable for many different applications.

### Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	Channel Polarity	Configuration	$V_{DS}^{(BR)}$ Min (V)	$V_{GS}^{Max}$ (V)	$V_{GS}^{(th)}$ Max (V)	$I_D^{Max}$ (A)	$P_D^{Max}$ (W)	$R_{DS(on)}^{n)}$ Max @ $V_{GS} = 2.5$ V (mΩ)	$R_{DS(on)}^{n)}$ Max @ $V_{GS} = 4.5$ V (mΩ)	$R_{DS(on)}^{n)}$ Max @ $V_{GS} = 10$ V (mΩ)	$Q_3^{Typ}$ @ $V_{GS} = 4.5$ V (nC)	$Q_3^{Typ}$ @ $V_{GS} = 10$ V (nC)	$C_{iss}^{Typ}$ (pF)	Package Type
FDMS7658AS	0.476	Pb-free Halide free non AEC-Q and PPAP	Active	N-Channel	Single	30	20	3	176	89	-	2.4	1.9	29	35	5525	PQFN-8

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

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