

Product Overview

FDMS3602AS: Asymmetric Dual N-Channel PowerTrench® Power Stage MOSFET 25V

For complete documentation, see the data sheet.

This device includes two specialized N-Channel MOSFETs in a dual PQFN package. The switch node has been internally connected to enable easy placement and routing of synchronous buck converters. The control MOSFET (Q1) and synchronousSyncFET (Q2) have been designed to provide optimal power efficiency.

Features

 $\begin{array}{ll} \bullet & \text{Q1: N-Channel} \\ \text{Max } r_{\text{DS(on)}} = 5.6 \text{ m}\Omega \\ \text{Max } r_{\text{DS(on)}} = 8.5 \text{ m}\Omega \end{array} \quad \text{at } V_{\text{GS}} = 10 \text{ V}, \ I_D = 15 \text{ A} \\ \text{at } V_{\text{GS}} = 4.5 \text{ V}, \ I_D = 14 \text{ A} \\ \bullet & \text{Q2: N-Channel} \\ \text{Max } r_{\text{DS(on)}} = 2.2 \text{ m}\Omega \\ \text{Max } r_{\text{DS(on)}} = 3.4 \text{ m}\Omega \end{array} \quad \text{at } V_{\text{GS}} = 10 \text{ V}, \ I_D = 26 \text{ A} \\ \text{Max } r_{\text{DS(on)}} = 3.4 \text{ m}\Omega \end{array} \quad \text{at } V_{\text{GS}} = 4.5 \text{ V}, \ I_D = 22 \text{ A} \\ \end{array}$

- Low inductance packaging shortens rise/fall times, resulting in lower switching losses
- · MOSFET integration enables optimum layout for lower circuit inductance and reduced switch node ringing
- RoHS Compliant

Applications

Server

Part Electrical Specifications																
Product	Compliance	Status	Chan nel Polari ty	Confi gurati on	V _{(BR)D} SS 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 V (m Ω)	$R_{DS(on)}$ Max @ V_{GS} = $4.5 V$ (m Ω)	$R_{DS(on)}$ Max @ V_{GS} = 10 V (m Ω)	Q _g Typ @ V _{GS} = 4.5 V (nC)	Q _g Typ @ V _{GS} = 10 V (nC)	C _{iss} Typ (pF)	Pack age Type
FDMS3602AS	Pb-free Halide free	Active	N- Chan nel	Dual	25	20	3	Q1: 15.0, Q2: 26.0	Q1:2. 2, Q2: 2.5	-	Q1: 8.5, Q2: 3.4	Q1: 5.6, Q2: 2.2	22	21	3260	PQF N-8

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

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