P-CHANNEL ENHANCEMENT MODE VERTICAL DMOS FET

ZVP4424A

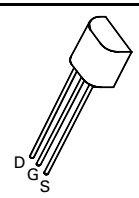
ISSUE 2 – SEPTEMBER 94

FEATURES

* 240 Volt V_{DS}
* $R_{DS(on)}$=9Ω
* Low threshold

APPLICATIONS

* Electronic Hook Switch



E-Line
TO92 Compatible

ABSOLUTE MAXIMUM RATINGS.

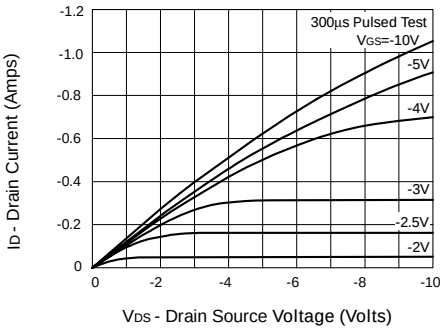
PARAMETER	SYMBOL	VALUE	UNIT
Drain-Source Voltage	V_{DS}	-240	V
Continuous Drain Current at T_{amb}=25°C	I_D	-200	mA
Pulsed Drain Current	I_{DM}	-1	A
Gate Source Voltage	V_{GS}	± 40	V
Power Dissipation at T_{amb}=25°C	P_{tot}	750	mW
Operating and Storage Temperature Range	T_j:T_{stg}	-55 to +150	°C

ELECTRICAL CHARACTERISTICS (at T_{amb} = 25°C unless otherwise stated).

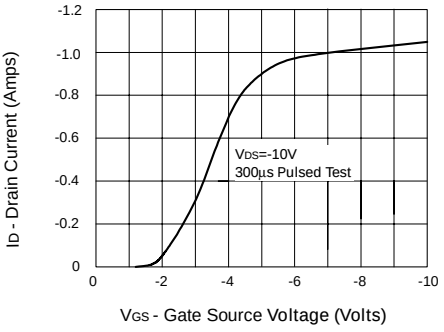
PARAMETER	SYMBOL	MIN.	TYP	MAX.	UNIT	CONDITIONS.
Drain-Source Breakdown Voltage	BV_{DSS}	-240			V	I_D=-1mA, V_{GS}=0V
Gate-Source Threshold Voltage	$V_{GS(th)}$	-0.7	-1.4	-2.0	V	ID=-1mA, V_{DS}= V_{GS}
Gate-Body Leakage	I_{GSS}			100	nA	V_{GS}=± 40V, V_{DS}=0V
Zero Gate Voltage Drain Current	I_{DSS}			-10 -100	µA µA	V_{DS}=-240 V, V_{GS}=0 V_{DS}=-190V, V_{GS}=0V, T=125°C
On-State Drain Current	$I_{D(on)}$	-0.75	-1.0		A	V_{DS}=-10 V, V_{GS}=-10V
Static Drain-Source On-State Resistance	$R_{DS(on)}$		7.1 8.8	9 11	Ω Ω	V_{GS}=-10V,I_D=-200mA V_{GS}=-3.5V,I_D=-100mA
Forward Transconductance (1) (2)	g_{fs}	125			mS	V_{DS}=-10V,I_D=-0.2A
Input Capacitance (2)	C_{iss}		100	200	pF	V_{DS}=-25V, V_{GS}=0V, f=1MHz
Common Source Output Capacitance (2)	C_{oss}		18	25	pF	
Reverse Transfer Capacitance (2)	C_{rss}		5	15	pF	
Turn-On Delay Time (2)(3)	$t_{d(on)}$		8	15	ns	V_{DD}≈-50V, I_D=-0.25A, V_{GEN}=-10V
Rise Time (2)(3)	t_r		8	15	ns	
Turn-Off Delay Time (2)(3)	$t_{d(off)}$		26	40	ns	
Fall Time (2)(3)	t_f		20	30	ns	

(1) Measured under pulsed conditions. Width=300µs. Duty cycle ≤2% (2) Sample test.
(3) Switching times measured with 50Ω source impedance and <5ns rise time on a pulse generator

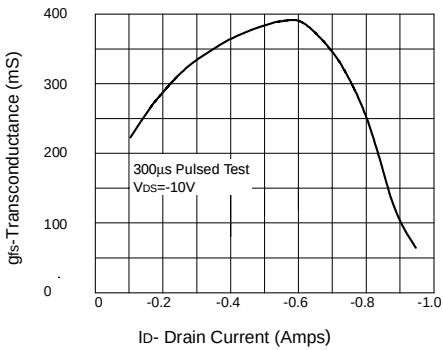
TYPICAL CHARACTERISTICS



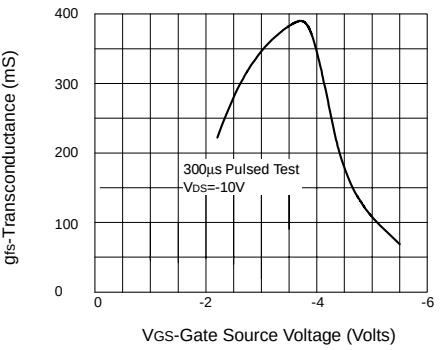
Saturation Characteristics



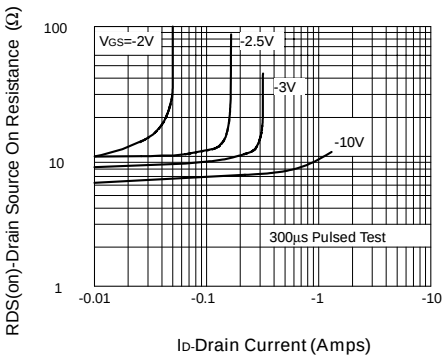
Transfer Characteristics



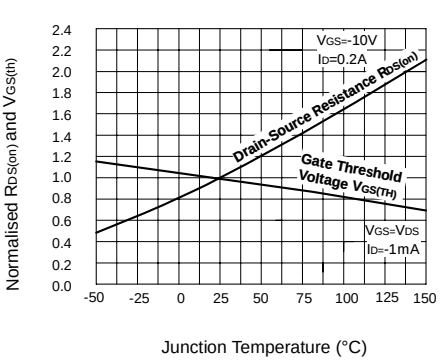
Transconductance v drain current



Transconductance v gate-source voltage



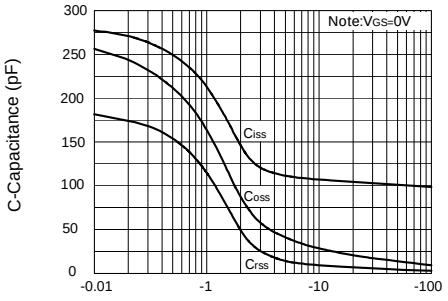
On-resistance vs Drain Current



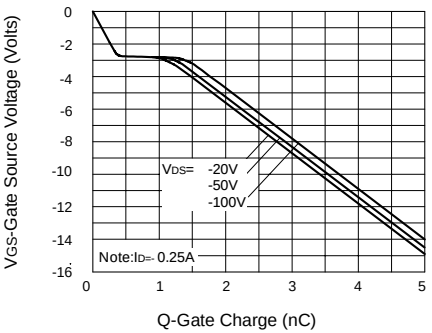
Normalised $R_{DS(on)}$ and $V_{GS(th)}$ vs Temperature

ZVP4424A

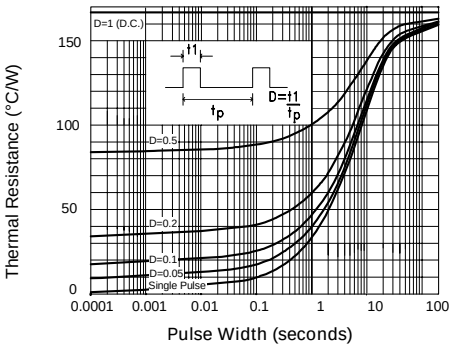
TYPICAL CHARACTERISTICS



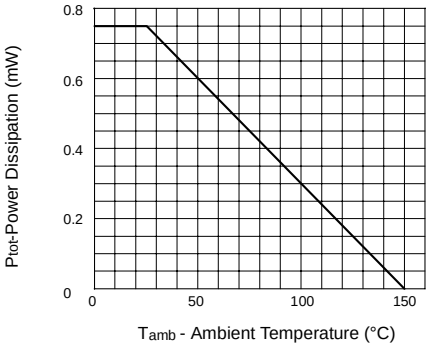
Capacitance v drain-source voltage



Gate charge v gate-source voltage



Maximum transient thermal impedance



Derating Curve

ENTEGRECİ

Bu belge www.entegreci.com üzerinden sunulmaktadır.

Elektronik komponent tedarikinde Entegreci

Entegreci, Eskişehir merkezli, Türkiye geneline satış yapan bir elektronik komponent mağazasıdır. Entegreler (IC), mikrodenetleyiciler, transistörler, diyotlar, pasif elemanlar, konnektörler, modüller ve geliştirme kartları tek adetten seri üretim adetlerine kadar satılır. Ürün sayfalarında güncel stok durumunu, fiyatı ve datasheet bağlantısını bulabilirsiniz.

Parça koduyla arama

Üretici parça numarasını yazın; stok ve fiyatı hemen görün.

www.entegreci.com

Ürün kategorileri

Entegreden kapasitöre tüm elektronik komponent kategorileri.

Kategorilere göz atın

Üreticiler

Aradığınız üreticinin ürünlerini tek sayfada inceleyin.

Üreticileri görün

Toplu alım ve teklif

Listede olmayan ya da yüksek adetli parçalar için teklif isteyin.

Teklif isteyin

www.entegreci.com | **destek@entegreci.com** | **0850 305 90 34**

Entegreci is an online electronic components store based in Türkiye. Search by manufacturer part number to see stock, prices and datasheets for integrated circuits, microcontrollers, transistors, passive components and connectors, or request a quote for parts that are not listed.

Bu sayfa Entegreci tarafından eklenmiştir. Belgenin önceki sayfaları asıl yayıncısına aittir ve içeriği değiştirilmemiştir; en güncel sürüm için belgenin yayıncısına başvurun.