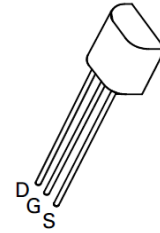


Features and Benefits

- $V_{DS} = 45V$
- $R_{DS(ON)} = 14\Omega$
- For automotive applications requiring specific change control (i.e. parts qualified to AEC-Q101, PPAP capable, and manufactured in IATF 16949 certified facilities), please [contact us](#) or your local Diodes representative.
- <https://www.diodes.com/quality/product-definitions/>



E-Line
TO92 Compatible

REFER TO ZVP2106A FOR GRAPHS

Absolute Maximum Ratings (@ $T_A = +25^\circ C$, unless otherwise specified.)

Characteristic	Symbol	Value	Unit
Drain-Source Voltage	V_{DS}	-45	V
Continuous Drain Current at $T_A = +25^\circ C$	I_D	-230	mA
Pulsed Drain Current	I_{DM}	-3	A
Gate-Source Voltage	V_{GS}	± 20	V
Power Dissipation at $T_A = +25^\circ C$	P_{TOT}	700	mW
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150	$^\circ C$

Electrical Characteristics (@ $T_A = +25^\circ C$, unless otherwise specified.)

Characteristic	Symbol	Min	Typ	Max	Unit	Test Condition
Drain-Source Breakdown Voltage	BV_{DSS}	-45	—	—	V	$I_D = -100\mu A, V_{GS} = 0V$
Gate-Source Threshold Voltage	$V_{GS(TH)}$	-1	—	-3.5	V	$I_D = -1mA, V_{DS} = V_{GS}$
Gate-Body Leakage	I_{GSS}	—	—	-20	nA	$V_{GS} = -15V, V_{DS} = 0V$
Zero Gate Voltage Drain Current	I_{DSS}	—	—	-500	nA	$V_{GS} = 0V, V_{DS} = -25V$
Static Drain-Source On-State Resistance (Note 1)	$R_{DS(ON)}$	—	—	14	Ω	$V_{GS} = -10V, I_D = -200mA$
Forward Transconductance (Note 1) (Note 2)	g_{fs}	—	150	—	ms	$V_{DS} = -10V, I_D = -200mA$
Input Capacitance (Note 2)	C_{iss}	—	60	—	pF	$V_{GS} = 0V, V_{DS} = -10V, f = 1.0MHz$
Turn-On Time (Note 2) (Note 3)	$t_{(ON)}$	—	—	20	ns	$V_{DD} \approx -25V, I_D = -500mA$
Turn-Off Time (Note 2) (Note 3)	$t_{(OFF)}$	—	—	20	ns	

- Notes:
1. Measured under pulsed conditions. Pulse Width = 300 μs . Duty cycle $\leq 2\%$.
 2. Sample test.
 3. Switching times measured with a 50 Ω source impedance and <5ns rise time on a pulse generator.

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