



**THE DATASHEET OF  
ZVN3306ASTZ**



# ZVN3306A

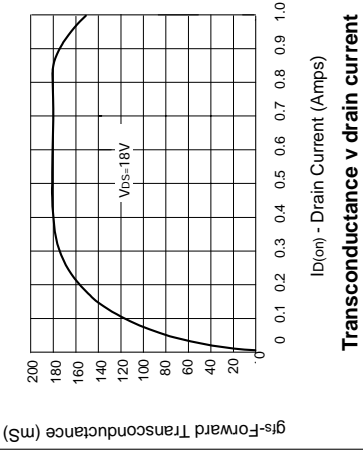
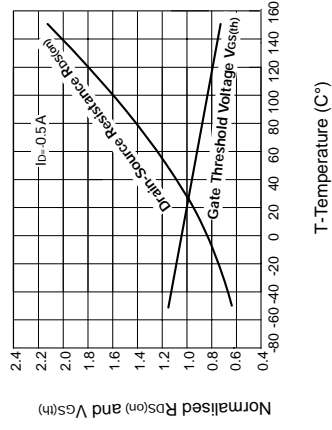
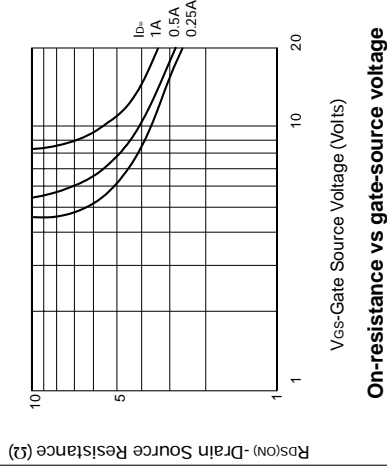
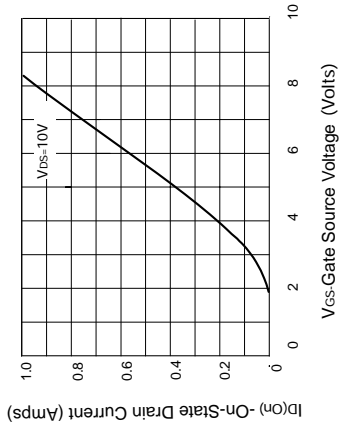
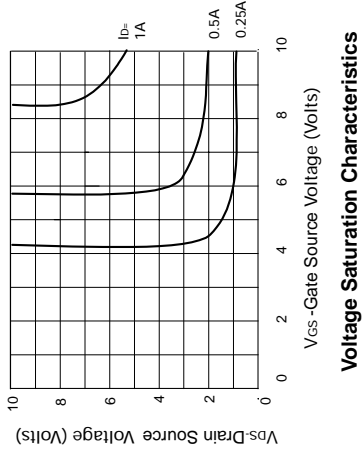
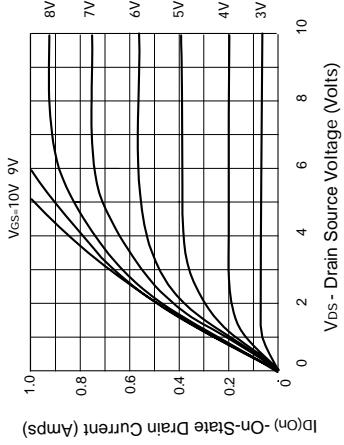
# N-CHANNEL ENHANCEMENT MODE VERTICAL DMOS FET

ISSUE 2 – MARCH 94

## FEATURES

- \* 60 Volt  $V_{DS}$
- \*  $R_{DS(on)} = 5\Omega$

## TYPICAL CHARACTERISTICS



## ABSOLUTE MAXIMUM RATINGS

| PARAMETER   |
|---|
| Drain-Source Voltage                                |
| Continuous Drain Current at $T_{amb} = 25^{\circ}C$ |
| Pulsed Drain Current                                |
| Gate-Source Voltage                                 |
| Power Dissipation at $T_{amb} = 25^{\circ}C$        |
| Operating and Storage Temperature Range             |

## ELECTRICAL CHARACTERISTICS

| PARAMETER                                   | SYMBOL       |
|---|--------------|
| Drain-Source Breakdown Voltage              | $BV_{DSS}$   |
| Gate-Source Threshold Voltage               | $V_{GS(th)}$ |
| Gate-Body Leakage                           | $I_{GSS}$    |
| Zero Gate Voltage Drain Current             | $I_{DSS}$    |
| On-State Drain Current(1)                   | $I_{D(on)}$  |
| Static Drain-Source On-State Resistance (1) | $R_{DS(on)}$ |
| Forward Transconductance(1)(2)              | $g_{fs}$     |
| Input Capacitance (2)                       | $C_{iss}$    |
| Common Source Output Capacitance (2)        | $C_{oss}$    |
| Reverse Transfer Capacitance (2)            | $C_{rss}$    |
| Turn-On Delay Time (2)(3)                   | $t_{d(on)}$  |
| Rise Time (2)(3)                            | $t_r$        |
| Turn-Off Delay Time (2)(3)                  | $t_{d(off)}$ |
| Fall Time (2)(3)                            | $t_f$        |

(1) Measured under pulsed conditions.  $W_{eff} = 100\mu m$

2) Sample test.

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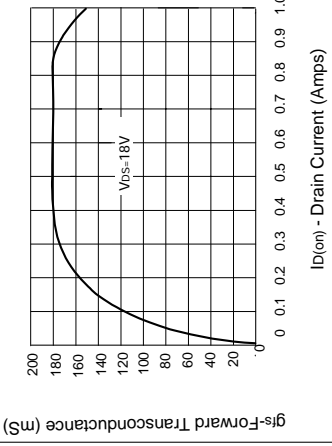
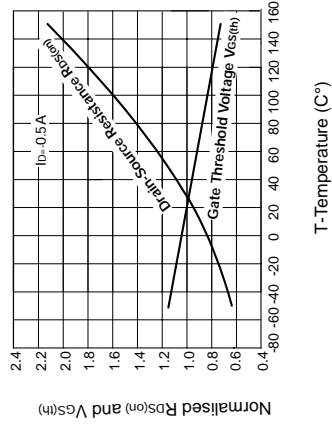
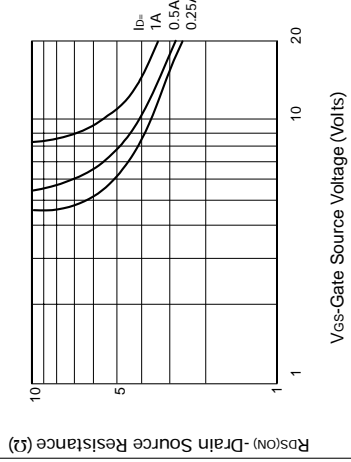
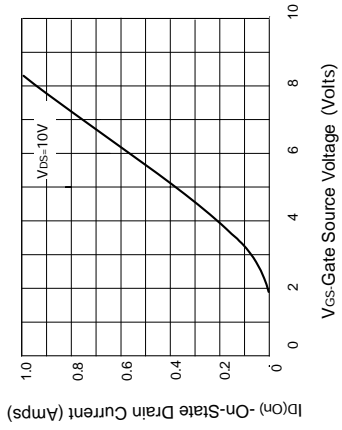
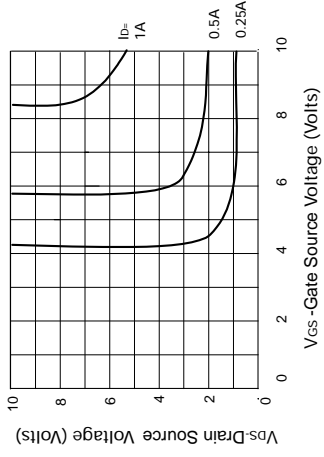
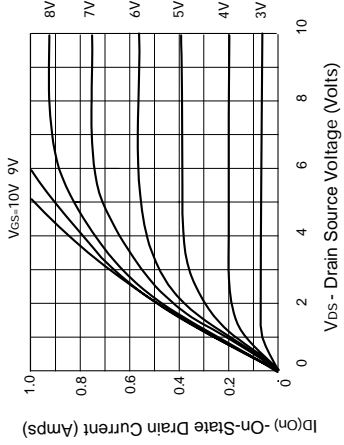
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## ELECTRICAL CHARACTERISTICS

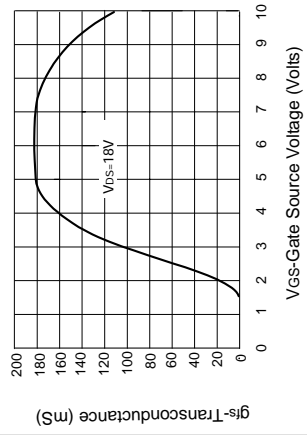
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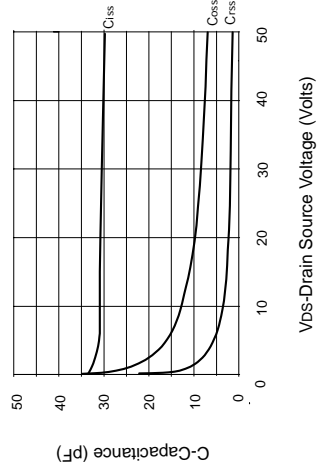
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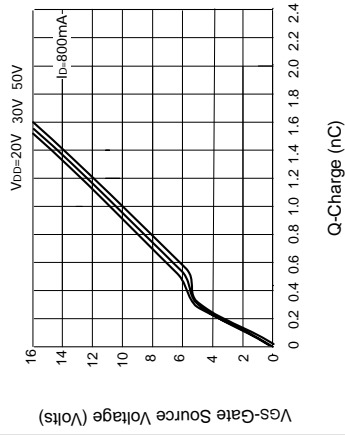
## TYPICAL CHARACTERISTICS



**Transconductance v gate-source voltage**





**Capacitance v drain-source voltage**



**Gate charge v gate-source voltage**

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