

# N-CHANNEL ENHANCEMENT MODE VERTICAL DMOS FET

## ZVN0117TA

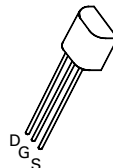
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### FEATURES

- \* 170 Volt  $BV_{DS}$

### APPLICATIONS

- \* Telephone handsets



E-Line  
TO92 Compatible

### ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Drain-Source Voltage	$V_{DS}$	170	V
Continuous Drain Current at $T_{amb}=25^{\circ}C$	$I_D$	160	mA
Pulsed Drain Current	$I_{DM}$	2	A
Gate Source Voltage	$V_{GS}$	$\pm 20$	V
Power Dissipation at $T_{amb}=25^{\circ}C$	$P_{tot}$	700	mW
Operating and Storage Temperature Range	$T_j; T_{stg}$	-55 to +150	$^{\circ}C$

### ELECTRICAL CHARACTERISTICS (at $T_{amb} = 25^{\circ}C$ unless otherwise stated).

PARAMETER	SYMBOL	MIN.	MAX.	UNIT	CONDITIONS.
Drain-Source Breakdown Voltage	$BV_{DSS}$	170		V	$I_D=10\mu A, V_{GS}=0V$
Gate-Body Leakage	$I_{GSS}$		100	nA	$V_{GS}=\pm 15V, V_{DS}=0V$
Zero Gate Voltage Drain Current	$I_{DSS}$		10 50	$\mu A$ $\mu A$	$V_{DS}=170V, V_{GS}=0$ $V_{DS}=140V, V_{GS}=0V,$ $T=50^{\circ}C(2)$
On-State Drain Current(1)	$I_{D(on)}$	100		mA	$V_{DS}=3V, V_{GS}=3.3V$
Static Drain-Source On-State Resistance (1)	$R_{DS(on)}$		23 23	$\Omega$ $\Omega$	$V_{GS}=3.3V, I_D=100mA$ $V_{GS}=3V, I_D=30mA$

(1) Measured under pulsed conditions. Width=300 $\mu s$ . Duty cycle  $\leq 2\%$