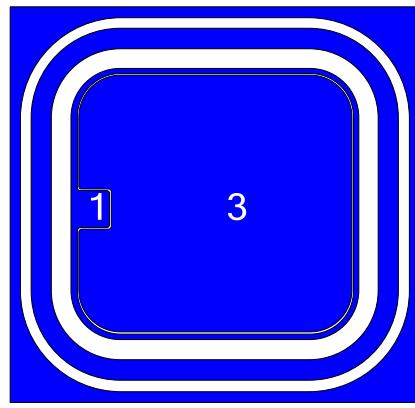


## 3VD156600YL HIGH VOLTAGE MOSFET CHIPS

### DESCRIPTION

- 3VD156600YL is a High voltage N-Channel enhancement mode power MOS-FET chip fabricated in advanced silicon epitaxial planar technology.
- Advanced termination scheme to provide enhanced voltage-blocking capability.
- Avalanche Energy Specified.
- Source-to-Drain Diode Recovery Time Comparable to a Discrete Fast Recovery Diode
- The chips may packaged in TO-92DT-3L type and the typical equivalent product is 1N60SS.
- The packaged product is widely used in AC-DC power suppliers, DC-DC converters and H-bridge PWM motor drivers.
- Die size: 1.6mm\*1.54mm.
- Chip Thickness:  $300\pm20\mu\text{m}$ .
- Top metal: Al, Backside Metal : Ag.



**CHIP TOPOGRAPHY**

### ABSOLUTE MAXIMUM RATINGS ( $T_{\text{amb}}=25^\circ\text{C}$ )

Parameter	Symbol	Ratings	Unit
Drain-Source Voltage	$V_{\text{DS}}$	600	V
Gate-Source Voltage	$V_{\text{GS}}$	$\pm 30$	V
Drain Current	$I_D$	500	mA
Operation Junction Temperature	$T_J$	150	$^\circ\text{C}$
Storage Temperature	$T_{\text{stg}}$	-55-150	$^\circ\text{C}$

www.DatasheetWorld.net

### ELECTRICAL CHARACTERISTICS ( $T_{\text{amb}}=25^\circ\text{C}$ )

Parameter	Symbol	Test conditions	Min.	Typ.	Max.	Unit
Drain-Source Breakdown Voltage	$V_{(\text{BR})\text{DSS}}$	$V_{\text{GS}} = 0\text{V}, I_D = 250\mu\text{A}$	600	---	----	V
Gate-Threshold Voltage	$V_{\text{th}(\text{GS})}$	$I_D = 250\mu\text{A}, V_{\text{DS}} = V_{\text{GS}}$	2.0	---	4.0	V
Gate-Body Leakage	$I_{\text{GSS}}$	$V_{\text{GS}} = \pm 30\text{V}, V_{\text{DS}} = 0\text{V}$	---	---	$\pm 100$	nA
Zero Gate Voltage Drain Current	$I_{\text{DSS}}$	$V_{\text{DS}} = 600\text{V}, V_{\text{GS}} = 0\text{V}$	---	---	1.0	$\mu\text{A}$
Drain-Source On-Resistance	$R_{\text{DS}(\text{on})}$	$I_D = 0.5\text{A}, V_{\text{GS}} = 10\text{V}$	---	---	13.5	$\Omega$
Source-Drain Diode Forward On Voltage	$V_{\text{FSD}}$	$I_D = 0.8\text{A}, V_{\text{GS}} = 0\text{V}$	---	---	1.0	V