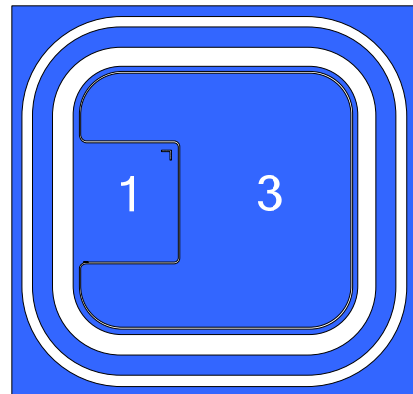


3VD186700YL HIGH VOLTAGE MOSFET CHIPS

DESCRIPTION

- 3VD186700YL 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-251-3L type and the typical equivalent product is 1N70.
- The packaged product is widely used in AC-DC power suppliers, DC-DC converters and H-bridge PWM motor drivers.
- Die size: 1.96mm*1.78mm.
- Chip Thickness: 300±20µm.
- Top metal: Al, Backside Metal: Ag.



1-Gate PAD 3-Source PAD

CHIP TOPOGRAPHY

ABSOLUTE MAXIMUM RATINGS (T_{amb}=25°C)

Parameter	Symbol	Ratings	Unit
Drain-Source Voltage	V _{DS}	700	V
Gate-Source Voltage	V _{GS}	±30	V
Drain Current	I _D	1.0	A
Operation Junction Temperature	T _J	150	°C
Storage Temperature	T _{stg}	-55-150	°C

ELECTRICAL CHARACTERISTICS (T_{amb}=25°C)

Parameter	Symbol	Test conditions	Min.	Typ.	Max.	Unit
Drain-Source Breakdown Voltage	V _{(BR)DSS}	V _{GS} = 0V, I _D =250µA	700	---	---	V
Gate-Threshold Voltage	V _{th(GS)}	I _D =250µA, V _{DS} =V _{GS}	2.0	---	4.0	V
Gate-Body Leakage	I _{GSS}	V _{GS} =±30V, V _{DS} =0V	---	---	±100	nA
Zero Gate Voltage Drain Current	I _{DSS}	V _{DS} =700V, V _{GS} =0V	---	---	1.0	µA
Drain-Source On-Resistance	R _{DS(on)}	I _D =0.4A, V _{GS} =10V	---	---	14.5	Ω
Source-Drain Diode Forward On Voltage	V _{FSD}	I _D =1.0A, V _{GS} =0V	---	---	1.4	V