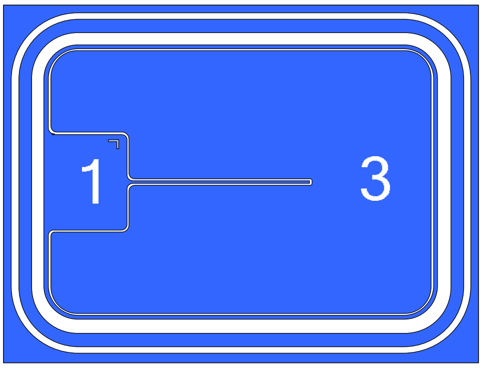
3VD235700YL HIGH VOLTAGE MOSFET CHIPS

DESCRIPTION

- 3VD235700YL 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 type and the typical equivalent product is 2N70.
- The packaged product is widely used in AC-DC power suppliers, DC-DC converters and H-bridge PWM motor drivers.



1-Gate PAD 3-Source PAD

CHIP TOPOGRAPHY

CHIP INFORMATION

Item	Characterization
Wafer Size	6Inch
Die Size	2060μm *2720μm
Gross Die Per Wafer	2815 dice/wafer
Wafer Thickness	300±20μm.
Top Metal /Thickness	Al(1%Si): 3μm
Back Metal /Thickness	Ti/Ni/Ag:0.1/0.3/0.4μm
Gate PAD size(PAD1)	454.2μm *536μm
Scribe line Width	80μm *80μm

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	2.0	A
Power Dissipation (TO-251 Package)	P_D	44	W
Operation Junction Temperature	T_J	150	°C
Storage Temperature	Tstg	-55～+150	°C

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

Parameter	Symbol	Test conditions	Min.	Typ.	Max.	Unit
Drain -Source Breakdown Voltage	B_{VDSS}	V_{GS}=0V, I_D=250μA	700	-	-	V
Gate Threshold Voltage	V_{TH}	V_{GS}= V_{DS}, I_D=250μA	2.0	-	4.0	V
Drain-Source Leakage Current	I_{DSS}	V_{DS}=700V, V_{GS}=0V	-	-	1.0	μA
Static Drain- Source On State Resistance	$R_{DS(on)}$	V_{GS}=10V, I_D=1.0A	-	-	6.5	Ω
Gate-Source Leakage Current	I_{GSS}	V_{GS}=±30V, V_{DS}=0V	-	-	±100	nA
Source-Drain Diode Forward on Voltage	V_{FSD}	I_S=2.0A, V_{GS}=0V	-	-	1.4	V

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