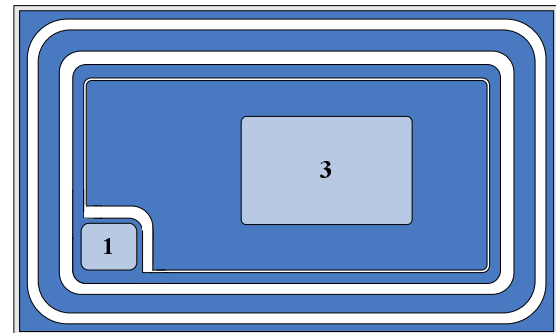


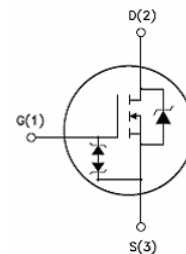
3VD223600NEYL N-CH MOSFET CHIPS WITH ESD PROTECTED STRUCTURE
DESCRIPTION

- Ø 3VD223600NEYL is a High voltage N-Channel enhancement mode power MOS-FET chip fabricated in advanced silicon epitaxial planar technology.
- Ø ESD improved capability
- Ø Advanced termination scheme to provide enhanced voltage-blocking capability.
- Ø Avalanche Energy Specified
- Ø Source-to-Drain Diode Recovery Time Comparable to a Discrete Fast Recovery Diode
- Ø The chips may packaged in TO-92 type.
- Ø The packaged product is widely used in AC-DC power suppliers, DC-DC converters and H-bridge PWM motor drivers.
- Ø Die size: 2.23mm*1.39mm.
- Ø Chip Thickness: 300±20µm.
- Ø Top metal : Al, Backside Metal : Ag.



PAD1:GATE

PAD3:SOURCE

CHIP TOPOGRAPHY

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

Parameter	Symbol	Ratings	Unit
Drain-Source voltage	V _{DS}	600	V
Gate-Source Voltage	V _{GS}	±30	V
Drain Current	I _D	300	mA
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	I _D =1mA	600	---	----	V
Gate-Threshold Voltage	V _{th} (GS)	I _D =50µA V _{DS} =V _{GS}	3	---	4.5	V
Gate-body Leakage	I _{GSS}	V _{GS} =±20V, V _{DS} =0V	---	---	±10	nA
Zero Gate Voltage Drain Current	I _{DSS}	V _{DS} =600V, V _{GS} =0V	---	---	1	µA
Drain-Source On-Resistance	R _{DS(on)}	I _D =0.4A, V _{GS} =10V	---	---	15	Ω
Source-Drain Diode Forward on Voltage	V _{FSD}	I _D =0.8A, V _{GS} =0V	---	---	1.6	V