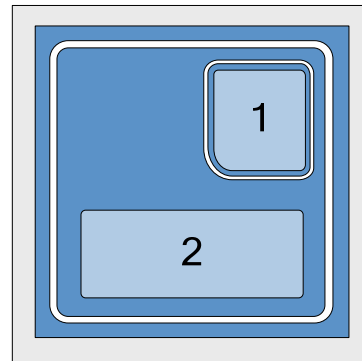


3VD037060NEJL N-CH MOSFET CHIPS WITH ESD PROTECTED STRUCTURE

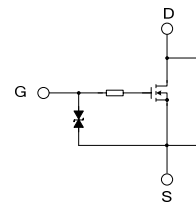
DESCRIPTION

- 3VD037060NEJL is a N-Channel enhancement mode MOS-FET chip fabricated in advanced silicon epitaxial planar technology.
- Zener diode ESD protected up to 500V (HBM).
- High density cell design for low RDS (ON).
- Rugged and reliable.
- Fast switching performance.
- High saturation current capability.
- The chips may be packaged in SOT-23 type .
- The packaged product is widely used in the small servo motor control, power MOS-FET gate drivers, and other switching applications.
- Die size: 0.37mm*0.37mm.
- Chip Thickness: 230±20μm.
- Top metal: Al, Backside Metal: Au.



PAD1:GATE PAD2:SOURCE

CHIP TOPOGRAPHY



EQUIVALENT CIRCUIT

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

Parameter	Symbol	Ratings	Unit
Drain-Source Voltage	V _{DS}	60	V
Gate-Source Voltage	V _{GS}	±20	V
Drain Current	I _D	100	mA
Drain Current --Plused *	I _{DM}	600	mA
Power Dissipation (SOT-23)	P _D	200	mW
Operation Junction Temperature	T _J	150	°C
Storage Temperature	T _{stg}	-55-150	°C

Note:* Repetitive rating: pulse width limited by maximum junction temperature.

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 =10μA	60	-	-	V
Gate-Threshold Voltage*	V _{th(GS)}	V _{DS} = V _{GS} , I _D =250μA	1.2	-	2.0	V
Gate-body Leakage	I _{GSS}	V _{DS} =0V, V _{GS} =±20V	-	-	±5	μA
Zero Gate Voltage Drain Current	I _{DSS}	V _{DS} =60V, V _{GS} =0V	-	-	1	μA
Drain-Source On-Resistance *	R _{DS(on)}	V _{GS} =5.0V, I _D =100mA	-	4	6	Ω
		V _{GS} =10V, I _D =100mA	-	3	5	