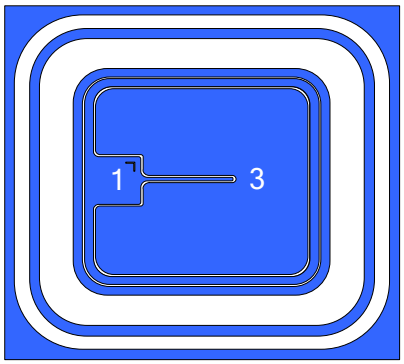
Silan
Microelectronics

3VD250600YL HIGH VOLTAGE MOSFET CHIPS

DESCRIPTION

- 3VD250600YL 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 2N60.
- The packaged product is widely used in AC-DC power suppliers, DC-DC converters and H-bridge PWM motor drivers.
- Die size: 2.59mm*2.42mm.
- Chip Thickness: 300±20μm.
- Top metal : Al, Backside Metal : Ag.



PAD1-Gate PAD3-Source

CHIP TOPOGRAPHY

ABSOLUTE MAXIMUM RATINGS (Tamb=25°C)

Parameter	Symbol	Ratings	Unit
Drain-Source Voltage	V_{DS}	600	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	-55～+150	°C
Storage Temperature	Tstg	-55～+150	°C

ELECTRICAL CHARACTERISTICS (Tamb=25°C)

Parameter	Symbol	Test conditions	Min.	Typ.	Max.	Unit
Drain -Source Breakdown Voltage	BV_{DSS}	V_{GS}=0V, I_D=250μA	600	-	-	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}=600V, V_{GS}=0V	-	-	1.0	μA
Static Drain- Source On State Resistance	$R_{DS(on)}$	V_{GS}=10V, I_D=1.0A	-	4.1	4.6	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