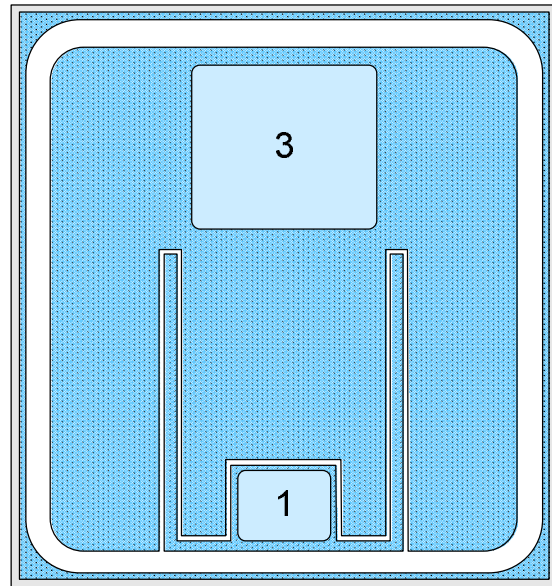


3VD393600YL HIGH VOLTAGE MOSFET CHIPS

DESCRIPTION

- Ø 3VD393600YL is a High voltage N-Channel enhancement mode power MOS-FET chip fabricated in advanced silicon epitaxial planar technology.
- 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-220 type and the typical equivalent product is 06N60.
- Ø The packaged product is widely used in AC-DC power suppliers, DC-DC converters and H-bridge PWM motor drivers.
- Ø Die size: 4.03mm*3.76mm.
- Ø Chip Thickness: 300±20µm.
- Ø Top metal : Al, Backside Metal : Ag.



PAD1:GATE

PAD3:SOURCE

CHIP TOPOGRAPHY

 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	7	A
Power Dissipation (TO-220 Package)	P _D	110	W
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	B _{VDS}	V _{GS} =0V, I _D =250µA	600			V
Gate Threshold Voltage	V _{TH}	V _{GS} = V _{DS} , I _D =250µA	2		4	V
Drain-Source Leakage Current	I _{DSS}	V _{DS} =600V, V _{GS} =0V			1	µA
Static Drain- Source On State Resistance	R _{DS(on)}	V _{GS} =10V, I _D =3.5A			1.2	Ω
Gate-Source Leakage Current	I _{GSS}	V _{GS} =±30V, V _{DS} =0V			±100	nA
Source-Drain Forward on Voltage	V _{FSD}	I _S =7A, V _{GS} =0V			1.3	V