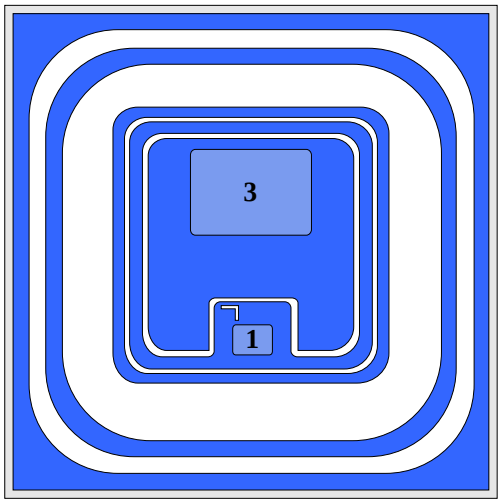
3VD212800YL HIGH VOLTAGE MOSFET CHIPS

DESCRIPTION

- Ø 3VD212800YL 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 1N80.
- Ø The packaged product is widely used in AC-DC power suppliers, DC-DC converters and H-bridge PWM motor drivers.
- Ø Die size: 2.12mm*2.02mm.
- Ø Chip Thickness: 300±20μm.
- Ø 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}	800	V
Gate-Source Voltage	V_{GS}	±30	V
Drain Current	I_D	1.0	A
Power Dissipation (TO-220 Package)	P_D	45	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	800	-	-	V
Gate Threshold Voltage	V_{TH}	V_{GS}= V_{DS}, I_D=250μA	3	-	4.5	V
Drain-Source Leakage Current	I_{DSS}	V_{DS}=800V, V_{GS}=0V	-	-	1	μA
Static Drain- Source On State Resistance	$R_{DS(on)}$	V_{GS}=10V, I_D=0.5A	-	-	16	Ω
Gate-Source Leakage Current	I_{GSS}	V_{GS}=±20V, V_{DS}=0V	-	-	±10	μA
Source-Drain Diode Forward on Voltage	V_{FSD}	I_S=1A, V_{GS}=0V	-	-	1.6	V