

Product Summary

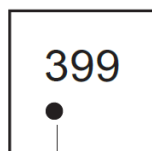
$V_{(BR)DSS}$	$R_{DS(on)TYP}$	I_D
-30V	105mΩ@-10V	-1.8A
	160mΩ@-4.5V	

Feature

- High power and current handing capability

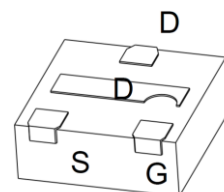
Application

- Load Switch for Portable Devices
- PWM applications

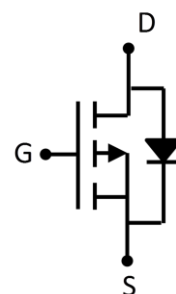
MARKING:


PIN 1

DFNWB1×1-3L



Schematic diagram


ABSOLUTE MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Drain-Source Voltage	V_{DS}	-30	V
Gate-Source Voltage	V_{GS}	± 20	V
Continuous Drain Current	I_D	-1.8	A
Pulsed Drain Current	I_{DM}	-5.0	A
Power Dissipation	P_D	0.2	W
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	625	$^{\circ}\text{C/W}$
Junction Temperature	T_J	150	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	-55~ +150	$^{\circ}\text{C}$

MOSFET ELECTRICAL CHARACTERISTICS($T_a=25^{\circ}\text{C}$ unless otherwise noted)

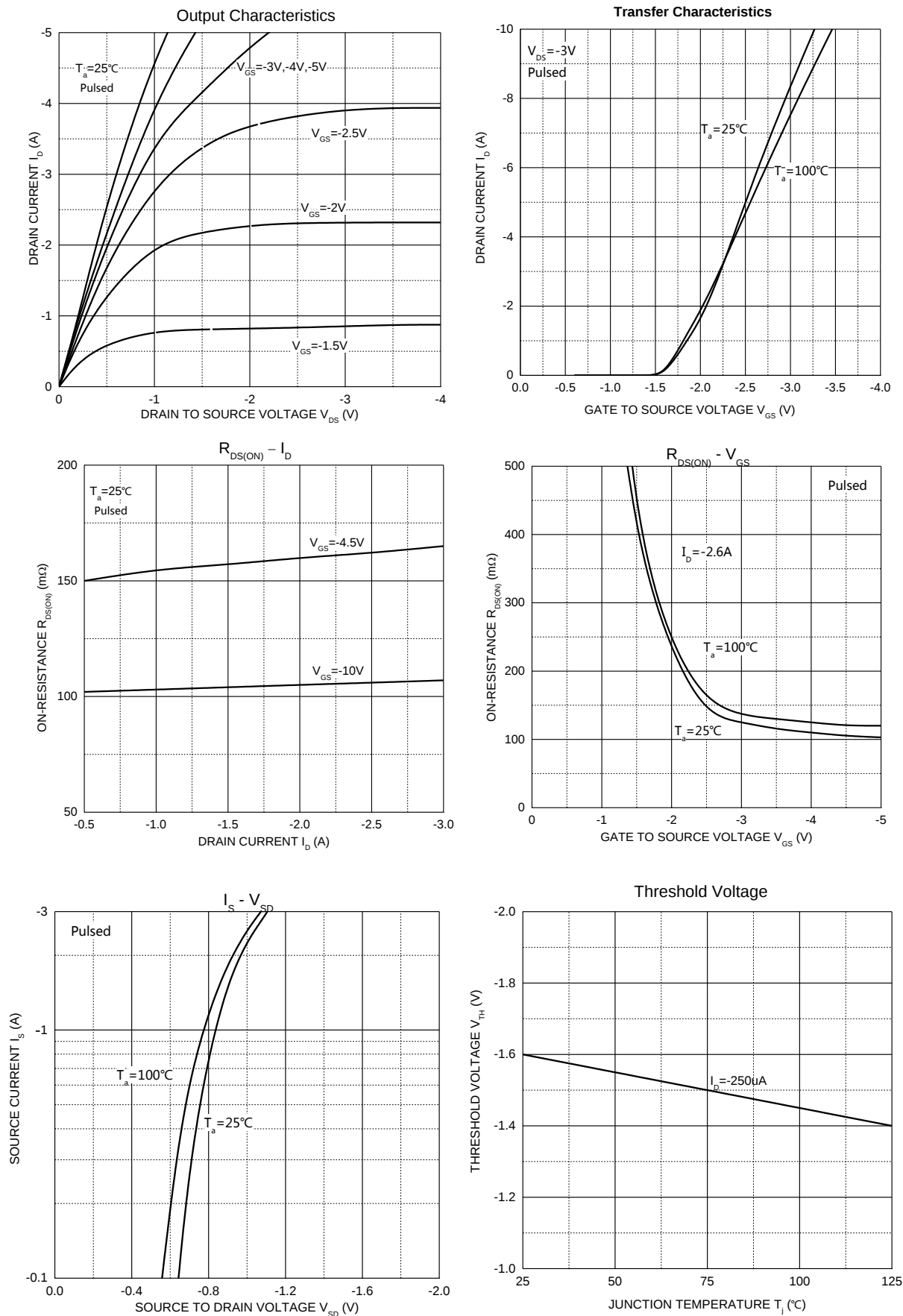
Parameter	Symbol	Test Condition	Min	Type	Max	Unit
Static Characteristics						
Drain-source breakdown voltage	V _{(BR)DSS}	V _{GS} = 0V, I _D =-250μA	-30			V
Zero gate voltage drain current	I _{DSS}	V _{DS} =-30V,V _{GS} = 0V			-1	μA
Gate-body leakage current	I _{GSS}	V _{GS} =±20V, V _{DS} = 0V			±100	nA
Gate threshold voltage	V _{GS(th)}	V _{DS} =V _{GS} , I _D =-250μA	-1.0	-1.6	-2.4	V
Drain-source on-resistance ^a	R _{DS(on)}	V _{GS} =-10V, I _D =-2A		105	130	mΩ
		V _{GS} =-4.5V, I _D =-2A		160	190	
Forward tranconductance ^a	g _{FS}	V _{DS} =-5V, I _D =-2A	1	3.8		S
Dynamic characteristics ^b						
Input Capacitance	C _{iss}	V _{DS} =-10V,V _{GS} =0V,f =1MHz		290		pF
Output Capacitance	C _{oss}			60		
Reverse Transfer Capacitance	C _{rss}			34		
Total Gate Charge	Q _g	V _{DS} =-10V,V _{GS} =-4.5V,I _D =-2A		3.0		nC
Gate-Source Charge	Q _{gs}			0.5		
Gate-Drain Charge	Q _{gd}			0.8		
Turn-on delay time	t _{d(on)}	V _{DD} =-10V, R _L =5Ω, V _{GEN} =-4.5V,R _g =3Ω		10		ns
Turn-on rise time	t _r			5.0		
Turn-off delay time	t _{d(off)}			21		
Turn-off fall time	t _f			7		
Source-Drain Diode characteristics						
Diode forward current	I _S	T _C =25℃			-1.5	A
Diode Forward voltage	V _{DS}	V _{GS} =0V, I _S =-2.0A			-1.2	V

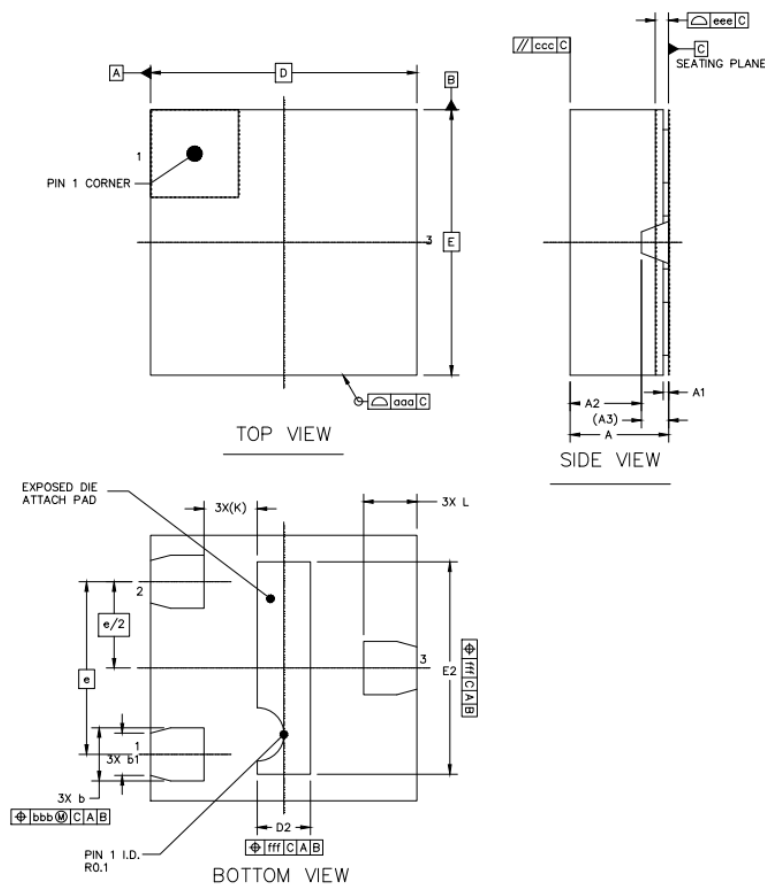
Notes :

a.Pulse Test : Pulse Width < 300 μs , Duty Cycle $\leq 2\%$.

b.Guaranteed by design, not subject to production testing.

Typical Electrical and Thermal Characteristics



DFNWB1×1-3L Package Information


Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.340	0.400	0.013	0.016
A1	0.000	0.050	0.000	0.002
A2	0.270TYP		0.011TYP	
A3	0.102REF		0.004REF	
b	0.150	0.250	0.006	0.010
b1	0.160REF		0.006REF	
D	1.000BSC		0.039BSC	
E	1.000BSC		0.039BSC	
e	0.650BSC		0.026BSC	
D2	0.100	0.300	0.004	0.012
E2	0.700	0.900	0.028	0.035
L	0.150	0.250	0.006	0.010
K	0.200REF		0.008REF	
aaa	0.100TYP		0.004TYP	
ccc	0.100TYP		0.004TYP	
eee	0.050TYP		0.002TYP	
bbb	0.100TYP		0.004TYP	
fff	0.100TYP		0.004TYP	