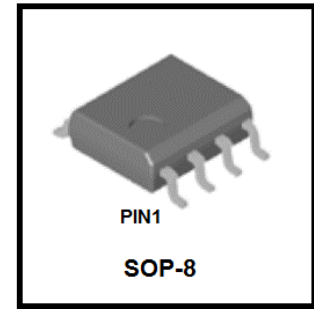


LDN4818T1G

Dual N-Channel 40-V (D-S) MOSFET

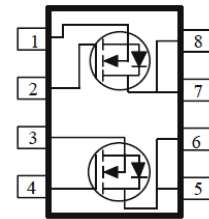
1. FEATURES

- Low RDS(on) trench technology.
- Low thermal impedance.
- Fast switching speed.
- We declare that the material of product compliance with RoHS requirements and Halogen Free.



2. APPLICATIONS

- LED
- DC/DC Conversion
- Motor Drives



3. DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
LDN4818T1G	4818	4000/Tape&Reel

4. MAXIMUM RATINGS(Ta = 25°C)

Parameter	Symbol	Limits	Unit
Drain–Source Voltage	VDSS	40	V
Gate–to–Source Voltage – Continuous	VGS	±20	V
Drain Current	ID	14	A
– Continuous TA =25°C		12	
– Continuous TA =70°C			
Pulsed Drain Current(Note 2)	IDM	50	
Power Dissipation TA =25°C	PD	2	W
Operating Junction and Storage Temperature Range	Tj/Tstg	-50 to 150	°C

5. THERMAL CHARACTERISTICS

Parameter	Symbol	Limits	Unit
Thermal Resistance,Junction-to-Ambient (Note 1)	RθJA	60	°C/W
Thermal Resistance,Junction-to-Case	RθJC	12	°C/W

1.Surface mounted on "1.5 x 1.5" FR4 board using 1 sq in pad, 2 oz Cu.

2.Pulse width limited by maximum junction temperature

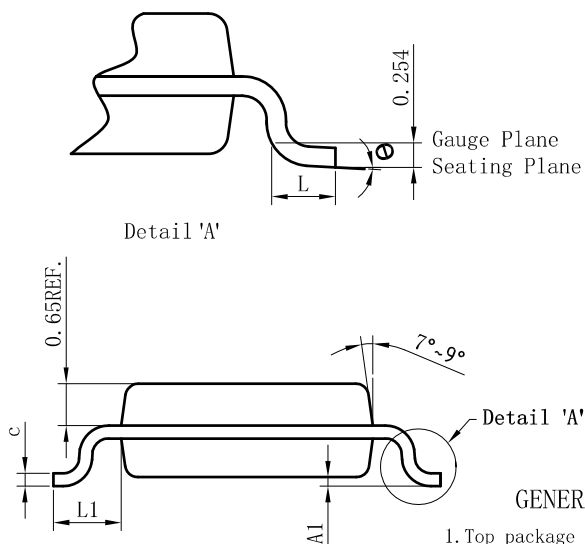
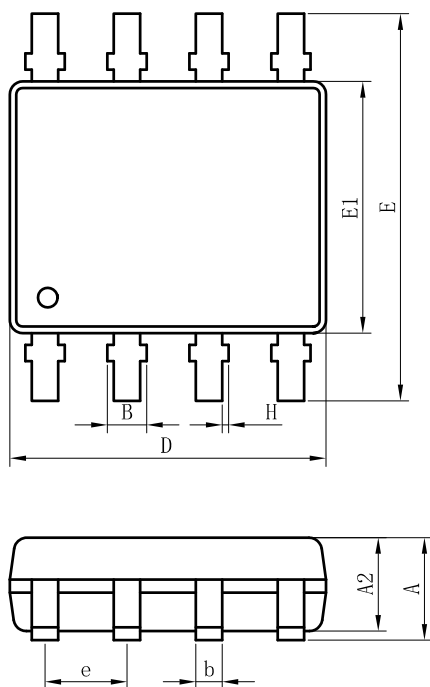
6. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

Characteristic	Symbol	Min.	Typ.	Max.	Unit
Static					
Drain–Source Breakdown Voltage (VGS = 0V, ID = 250μA)	V(BR)DSS	40	-	-	V
Drain-Source Leakage Current (VDS = 32V, VGS = 0V)	IDSS	-	-	1	μA
Gate–Body Leakage Current (VGS = ±20V, VDS = 0V)	IGSS	-	-	±100	nA
Gate Threshold Voltage (VDS = VGS, ID = 250μA)	VGS(th)	1	-	3	V
Static Drain–Source On–State Resistance(Note 3) (VGS = 10V, ID = 11A) (VGS = 4.5V, ID = 8.8A)	RDS(on)	- -	9.5 12	12 16	mΩ
Dynamic					
Input Capacitance (VGS = 0 V, f = 1.0MHz, VDS= 15 V)	Ciss	-	1532	-	pF
Output Capacitance (VGS = 0 V, f = 1.0MHz, VDS= 15 V)	Coss	-	136	-	
Reverse Transfer Capacitance (VGS = 0 V, f = 1.0MHz, VDS= 15 V)	Crss	-	123	-	
Total Gate Charge	(VDS = 20V, VGS = 4.5V, ID = 11A)	Qg	-	15	nC
Gate-Source Charge		Qgs	-	5	
Gate-Drain Charge		Qgd	-	5	
Forward Voltage (IS = 2.3A, VGS = 0V)	VSD	-	0.74	1.2	V

3. Pulse Test: Pulse Width ≤ 300 μs, Duty Cycle ≤ 2.0%.

7.OUTLINE AND DIMENSIONS

SOP8

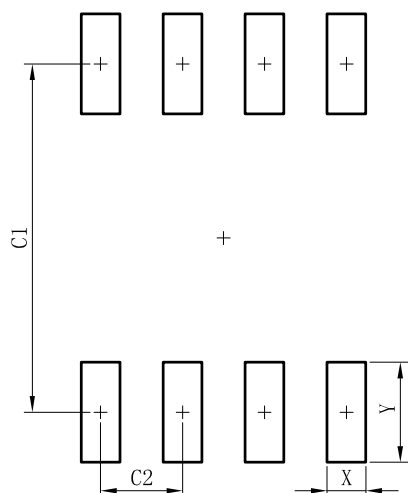


SOP8			
DIM	MIN	NOR	MAX
A	—	—	1.75
A1	0.10	0.15	0.20
A2	1.35	1.45	1.55
b	0.33	0.42	0.51
c	0.15	0.22	0.29
D	4.77	4.90	5.03
E	5.80	6.00	6.20
E1	3.80	3.90	4.00
e	1.27BSC		
L	0.46	0.66	0.86
L1	0.85	1.05	1.25
θ	0°	5°	8°
B	—	—	0.55
H	0	0.05	0.10
All Dimensions in mm			

GENERAL NOTES

- 1.Top package surface finish $Ra0.4 \pm 0.2\mu m$
- 2.Bottom package surface finish $Ra0.7 \pm 0.2\mu m$
- 3.Side package surface finish $Ra0.4 \pm 0.2\mu m$
- 4.Package Body Sizes Exclude Mold Flash, Protrusion Or Gate Burrs. Mold Flash, Protrusion Or Gate Burrs Shall Not Exceed 0.10 mm Per Side.
- 5.Dimension "b" Does Not Include Dambar Protrusion.

8.SOLDERING FOOTPRINT



SOP8	
DIM	(mm)
X	0.60
Y	1.55
C1	5.40
C2	1.27

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