

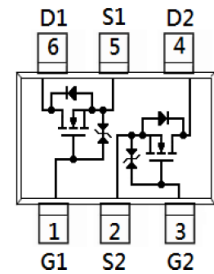
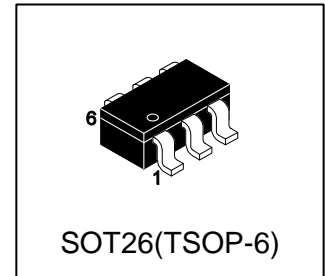
LDN3408ET1G

S-LDN3408ET1G

30V N-Channel Enhancement Mode MOSFET

1. FEATURES

- ESD Protected 2KV HBM
- $R_{DS(ON)} < 75m\Omega$ @ $V_{GS}=10V$, $I_D=3A$
- $R_{DS(ON)} < 90m\Omega$ @ $V_{GS}=4.5V$, $I_D=2A$
- $R_{DS(ON)} < 150m\Omega$ @ $V_{GS}=2.5V$, $I_D=1A$
- We declare that the material of product compliance with RoHS requirements and Halogen Free.
- S- prefix for automotive and other applications requiring unique site and control change requirements; AEC-Q101 qualified and PPAP capable.



2. DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
LDN3408ET1G	N8	3000/Tape&Reel
LDN3408ET3G	N8	10000/Tape&Reel

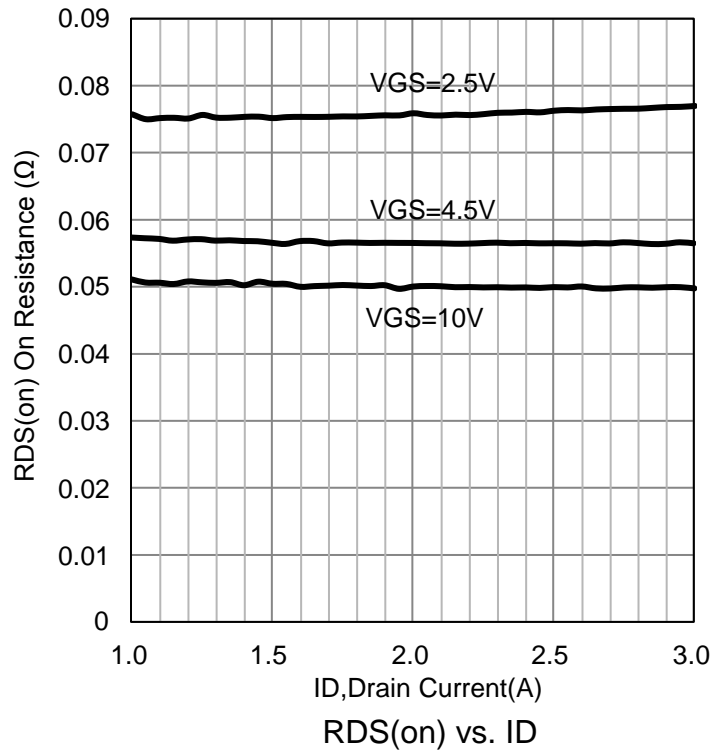
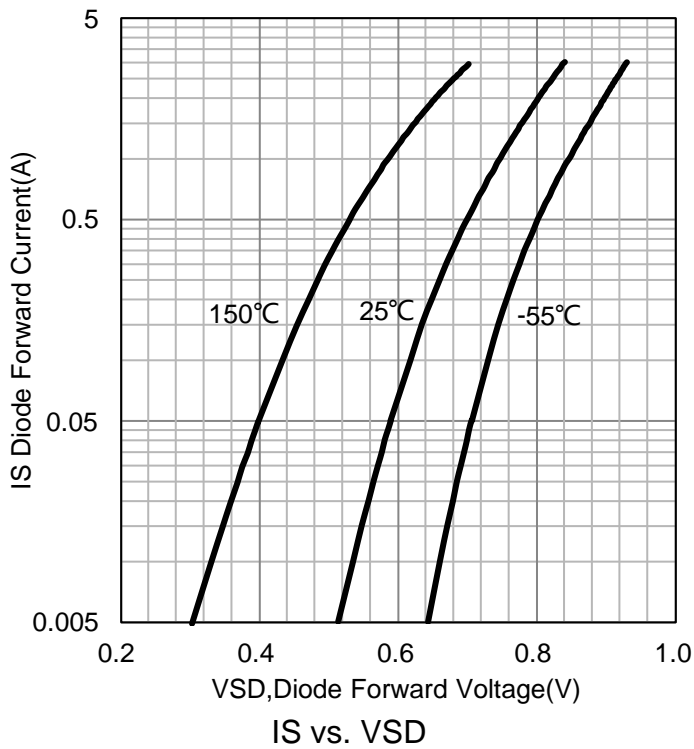
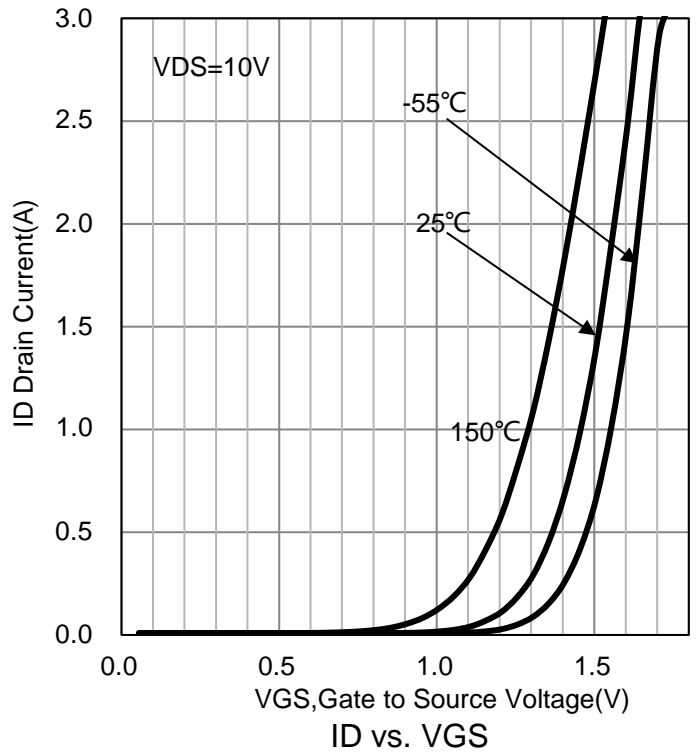
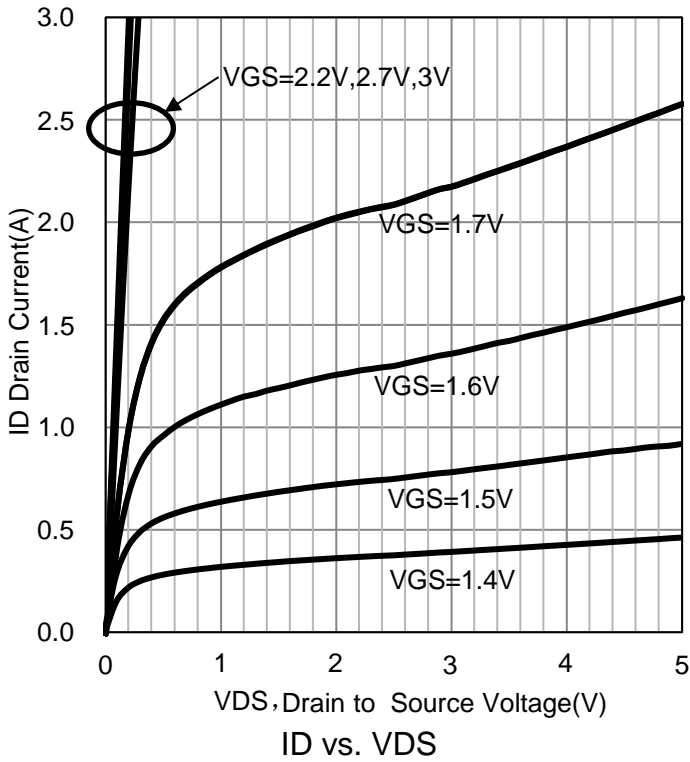
3. Absolute Maximum Ratings (TA =25 °C unless otherwise noted)

Parameter	Symbol	Limits	Unit	
Drain-Source Voltage	VDS	30	V	
Gate-Source Voltage	VGS	±12	V	
Drain Current-Continuous	ID	2	A	
Drain Current-Pulsed	IDM	8	A	
Power Dissipation	PD	Ta =25 °C	1.25	W
		Derate above 25 °C	10	mW/°C
Operating Junction and Storage Temperature Range	TJ ,TSTG	-55~+150	°C	
Typical Thermal resistance-Junction to Ambient	RθJA	100	°C/W	

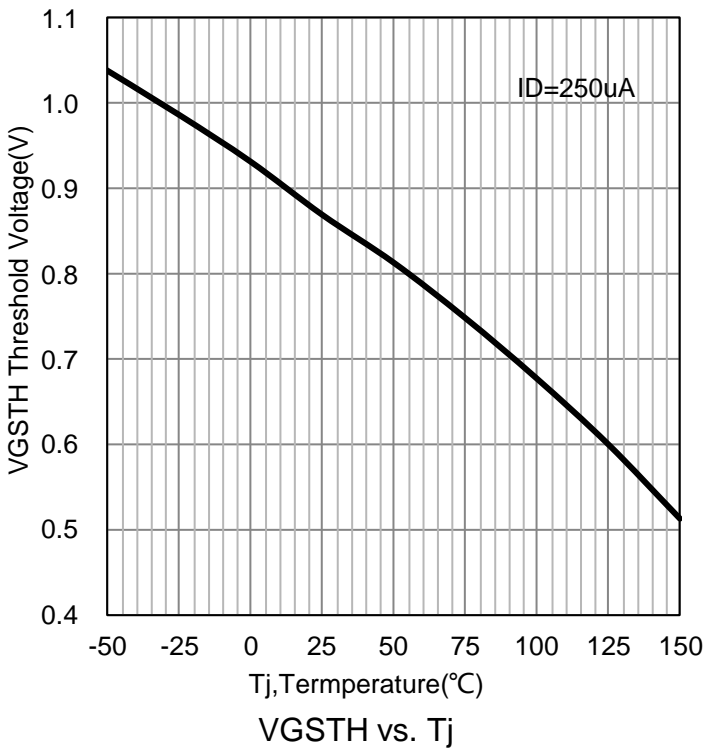
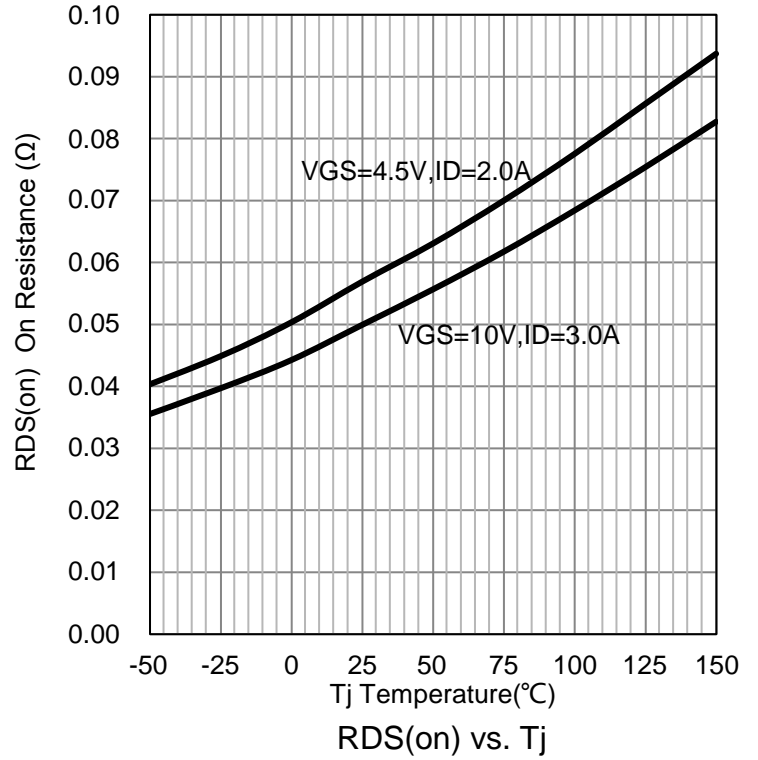
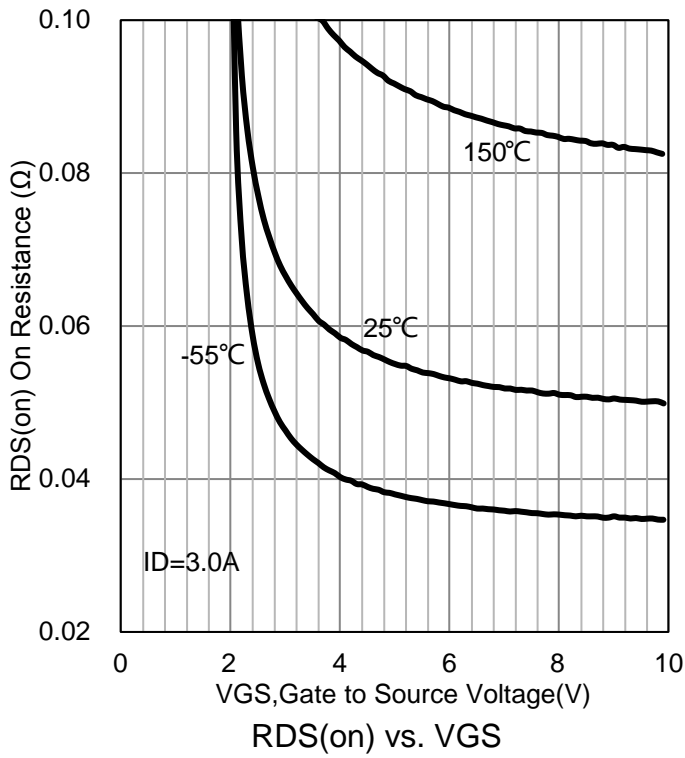
4. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	
Static						
Drain-Source Breakdown Voltage (VGS =0V ID =250μA)	BVDSS	30	-	-	V	
Gate Threshold Voltage (VDS =VGS ,ID =250μA)	VGS(th)	0.6	-	1.4	V	
Drain-Source On-State Resistance (VGS =10V, ID =3A)	RDS(ON)	-	60	75	mΩ	
(VGS =4.5V, ID =2A)		-	70	90	mΩ	
(VGS =2.5V, ID =1A)		-	110	150	mΩ	
Zero Gate Voltage Drain Current (VDS =30V, VGS =0V)	IDSS	-	0.01	1	μA	
Gate-Body Leakage Current (VGS =±12V, VDS =0V)	IGSS	-	1.4	±10	μA	
Dynamic						
Total Gate Charge	(VDS =15V, ID =2.1A, VGS =4.5V)	Qg	-	4.7	-	nC
Gate-Source Charge		Qgs	-	1.9	-	
Gate-Drain Charge		Qgd	-	1.6	-	
Input Capacitance	(VDS =15V, VGS =0V, f=1.0MHZ)	Ciss	-	247	-	PF
Output Capacitance		Coss	-	33	-	
Reverse Transfer Capacitance		Crss	-	5	-	
Turn-on Delay Time	(VDD =15V, ID =1A, VGS =4.5V, RG=6Ω)	td(on)	-	98	-	nS
Turn-on Rise Time		tr	-	128	-	
Turn-Off Delay Time		td(off)	-	2600	-	
Turn-Off Fall Time		tf	-	677	-	
Drain-Source Diode Characteristics						
Diode Forward Voltage (VGS =0V, IS =1.0A)	VSD	-	0.8	1.2	V	
Diode Forward Current	IS	-	-	1.8	A	

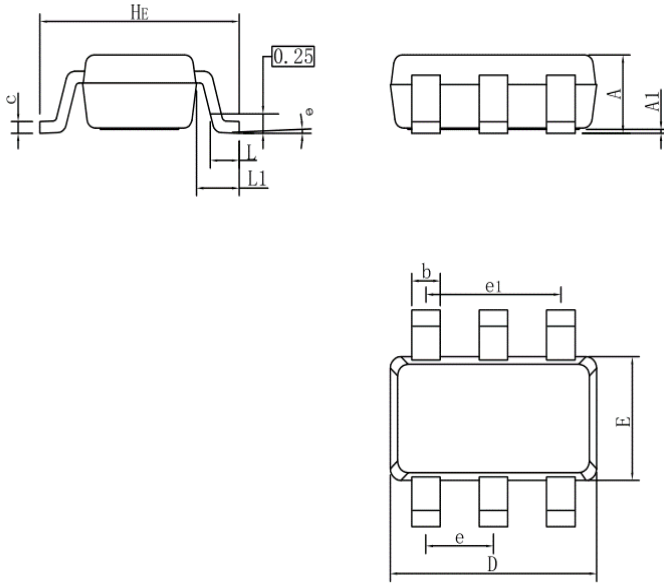
5.ELECTRICAL CHARACTERISTICS CURVES



5.ELECTRICAL CHARACTERISTICS CURVES (Con.)

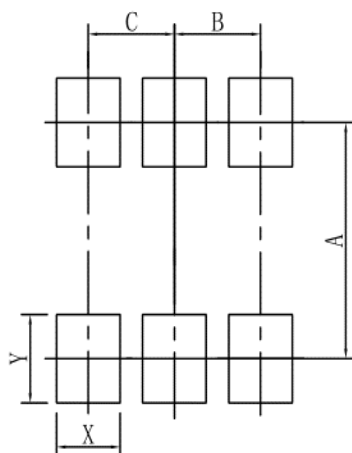


6. OUTLINE AND DIMENSIONS



SOT26			
DIM	MIN	NOR	MAX
A	0.90	1.00	1.10
A1	0.01	0.06	0.10
b	0.30	0.40	0.50
c	0.10	0.17	0.20
D	2.80	2.90	3.00
E	1.50	1.60	1.70
e	0.85	0.95	1.05
e1	1.80	1.90	2.00
L	0.20	0.40	0.60
L1	0.60REF		
HE	2.60	2.80	3.00
θ	0°	-	10°

7. SOLDERING FOOTPRINT



SOT26	
DIM	(mm)
X	0.70
Y	0.90
A	2.40
B	0.95
C	0.95