

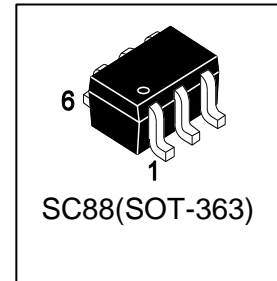
LBSS260DW1T1G

S-LBSS260DW1T1G

N-Channel 60-V Power Mosfet

1. FEATURES

- High speed switch
- ESD protected
- 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.

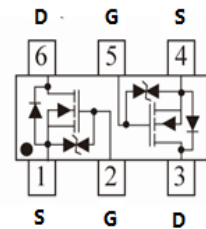


2. APPLICATION

- Portable appliances
- Load switch appliances

3. DEVICE MARKING AND ORDERING INFORMATION

| Device | Marking | Shipping |
|---------------|---------|-----------------|
| LBSS260DW1T1G | J3 | 3000/Tape&Reel |
| LBSS260DW1T3G | J3 | 10000/Tape&Reel |



4. MAXIMUM RATINGS(Ta = 25°C)

| Parameter | Symbol | Limits | Unit |
|-------------------------------------|--------|--------|------|
| Drain–Source Voltage | VDSS | 60 | Vdc |
| Gate–to–Source Voltage – Continuous | VGS | ±20 | Vdc |
| Drain Current | | | mAdc |
| – Continuous TA = 25°C | ID | 200 | |
| – Pulsed (tp ≤ 10µs) | IDM | 800 | |

5. THERMAL CHARACTERISTICS

| Parameter | Symbol | Limits | Unit |
|---|----------|----------|-------|
| Total Device Dissipation, FR-4 Board (Note 1) @ TA = 25°C Derate above 25°C | PD | 380 | mW |
| | | 3.05 | mW/°C |
| Thermal Resistance, Junction–to–Ambient(Note 1) | RθJA | 328 | °C/W |
| Junction and Storage temperature | TJ, Tstg | -55~+150 | °C |
| Maximum Lead Temperature for Solde Purposes, for 10 seconds | TL | 260 | °C |

1. FR-4 = 1.0×0.75×0.062 in.

6. ELECTRICAL CHARACTERISTICS (Ta= 25°C)
OFF CHARACTERISTICS

| Characteristic | Symbol | Min. | Typ. | Max. | Unit |
|--|--------|------|------|------|------|
| Drain–Source Breakdown Voltage (VGS = 0, ID = 250μAdc) | VBRDSS | 60 | - | - | Vdc |
| Zero Gate Voltage Drain Current (VGS = 0, VDS = 55 Vdc) | IDSS | - | - | 0.1 | μAdc |
| Gate–Body Leakage Current, Forward (VGS=20V, VDS=0V) | IGSSF | - | - | 5 | μAdc |
| Gate–Body Leakage Current, Reverse (VGS= -20V, VDS=0V) | IGSSR | - | - | -5 | μAdc |

ON CHARACTERISTICS (Note 2)

| | | | | | |
|---|---------|-----|---|-----------------------|------|
| Gate Threshold Voltage (VDS=VGS,IDS=250μA) | VGS(th) | 0.5 | - | 1.0 | Vdc |
| Static Drain–Source On–State Resistance (VGS=10V,IDS=0.5A) (VGS=4.5V,ID=0.1A) (VGS=2.5V, IDS=0.05A) (VGS=1.8V, IDS=0.01A) | RDS(on) | - | - | 1.44 2 2.5 3 | Ohms |
| Diode Forward Voltage (ISD = 0.5 A, VGS = 0 V) | VSD | 0.5 | - | 1.35 | Vdc |

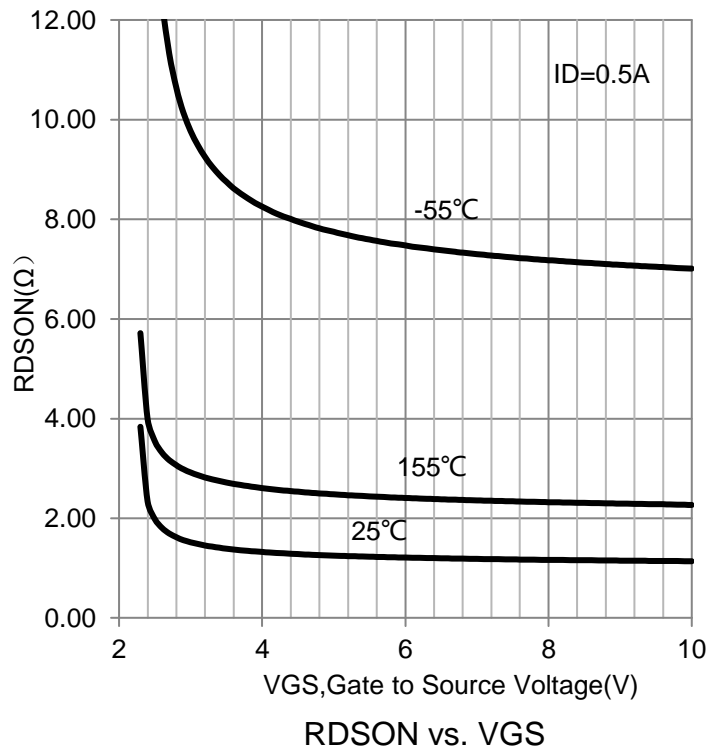
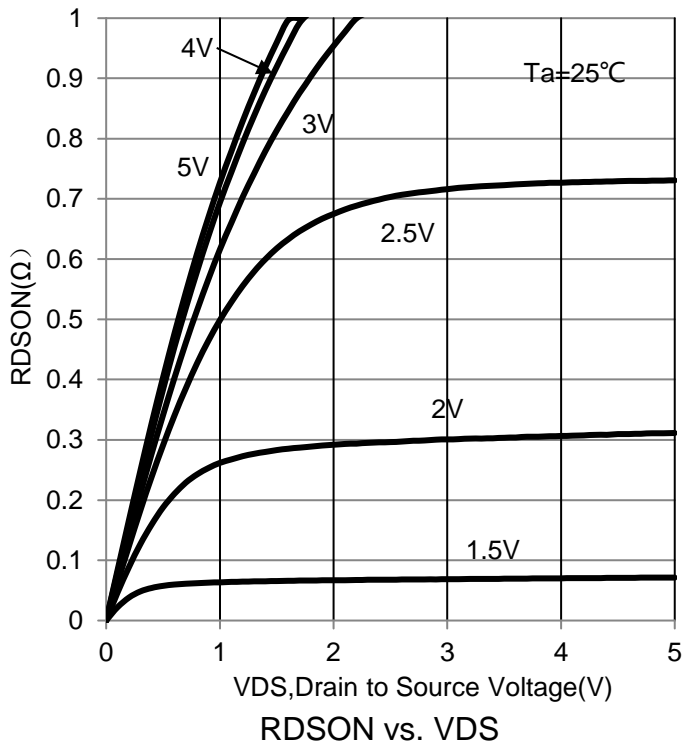
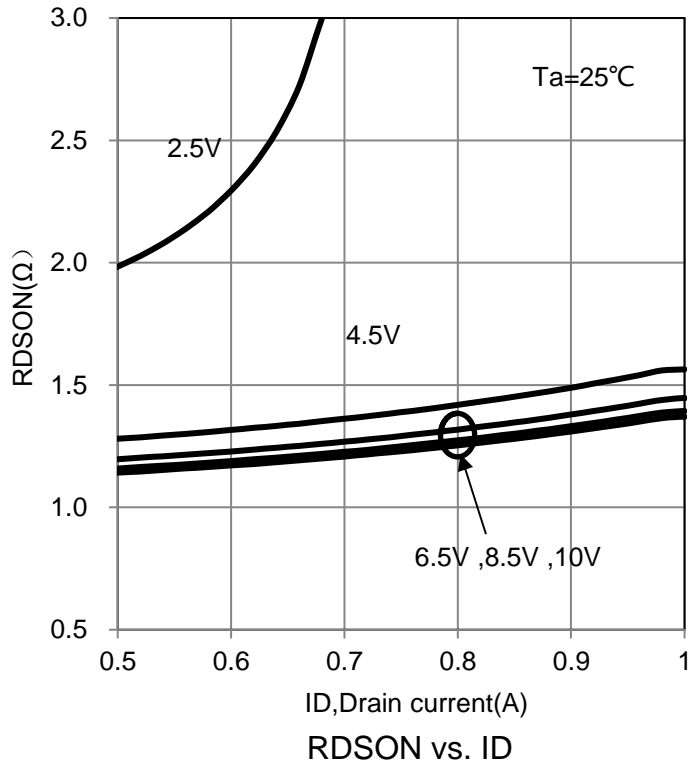
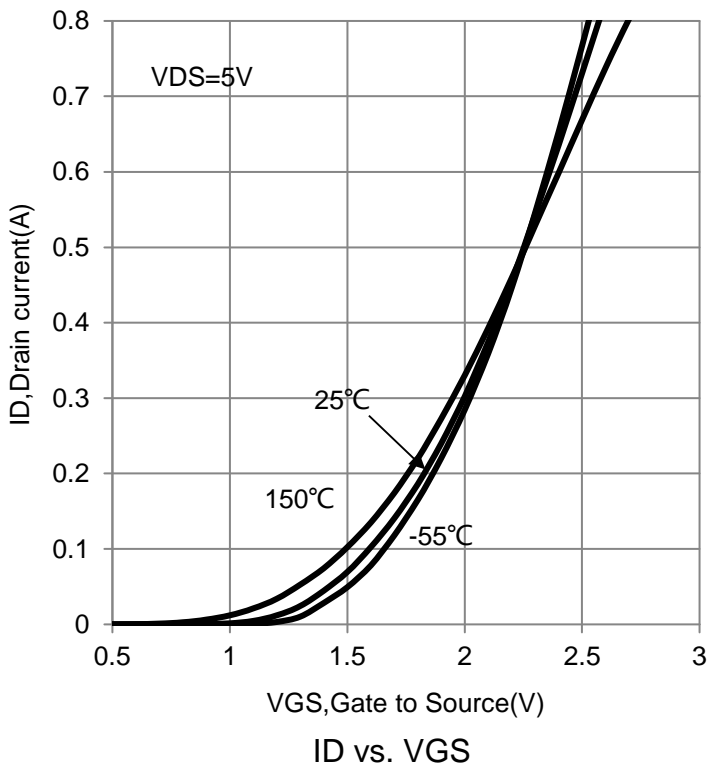
DYNAMIC CHARACTERISTICS

| | | | | | |
|--|------|---|------|---|----|
| Input Capacitance (VDS = 25 Vdc, VGS = 0, f = 1.0 MHz) | Ciss | - | 22.8 | - | pF |
| Output Capacitance (VDS = 25 Vdc, VGS = 0, f = 1.0 MHz) | Coss | - | 3.5 | - | pF |
| Reverse Transfer Capacitance (VDS = 25 Vdc, VGS = 0, f = 1.0 MHz) | Crss | - | 2.9 | - | pF |

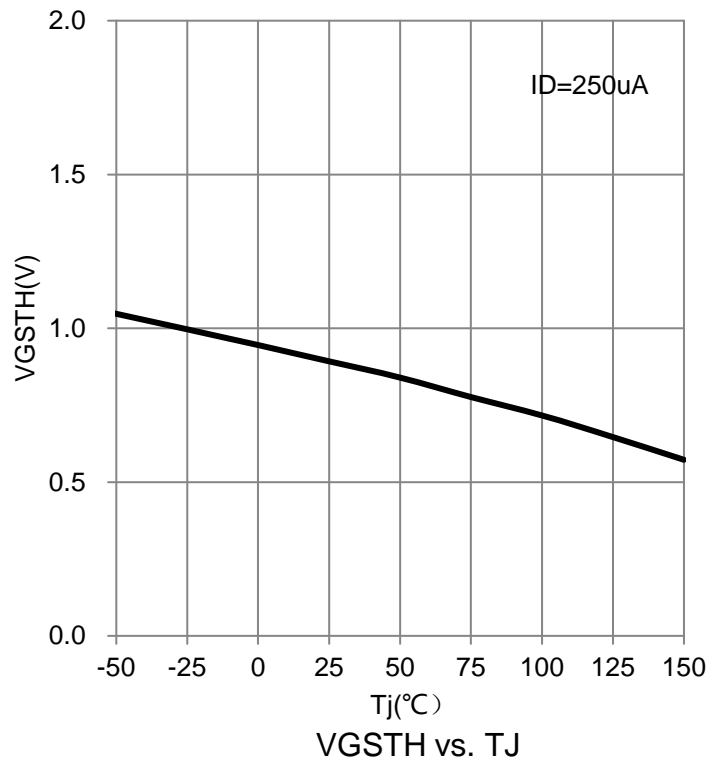
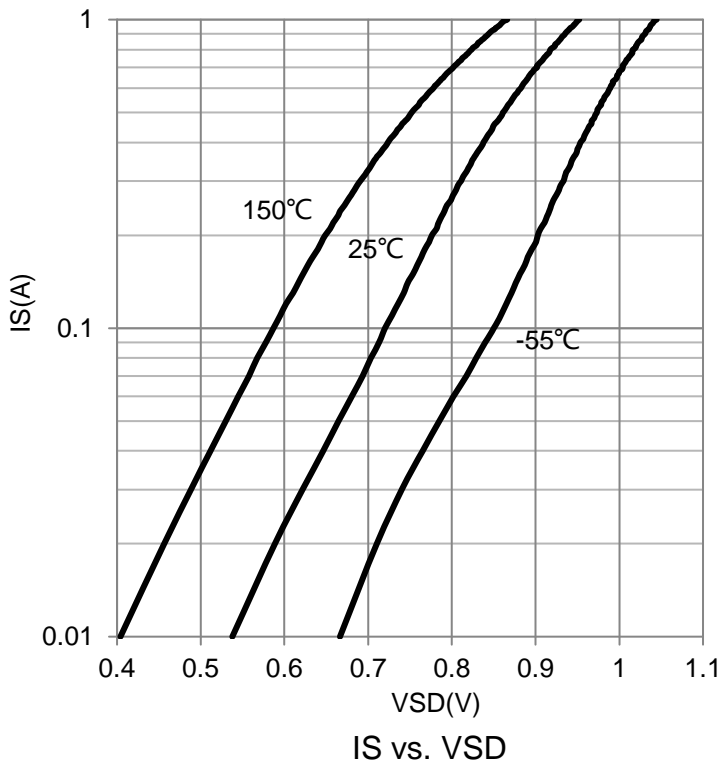
SWITCHING CHARACTERISTICS

| | | | | | | |
|---------------------|---|---------|---|-----|---|----|
| Turn-On Delay Time | (VDD = 30 Vdc , VGEN = 10 V, RG =25Ω ,RL =60 Ω, ID =500 mAdc) | td(on) | - | 3.8 | - | ns |
| Turn-Off Delay Time | | td(off) | - | 19 | - | |

2.Pulse Test: Pulse Width $\leq 300 \mu s$, Duty Cycle $\leq 2.0\%$.

7. ELECTRICAL CHARACTERISTICS CURVES


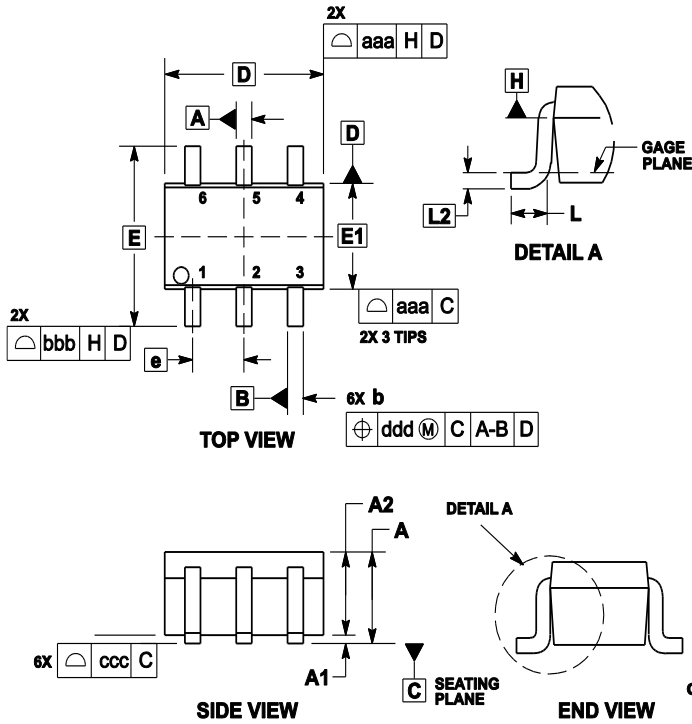
7. ELECTRICAL CHARACTERISTICS CURVES(Con.)



8. OUTLINE AND DIMENSIONS

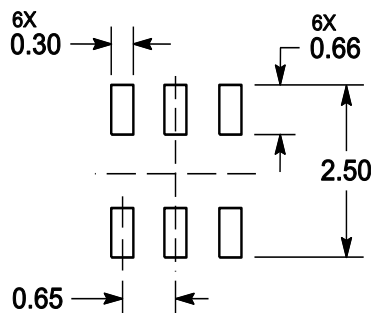
Notes:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: MILLIMETERS.
3. MAXIMUM LEAD THICKNESS INCLUDES LEAD FINISH. MINIMUM LEAD THICKNESS IS THE MINIMUM THICKNESS OF BASE MATERIAL.
4. DIMENSIONS D AND E DO NOT INCLUDE MOLD FLASH, PROTRUSIONS OR GATE BURRS.



| DIM | MILLIMETERS | | | INCHES | | |
|-----|-------------|------|------|-----------|-------|-------|
| | MIN | NOM | MAX | MIN | NOM | MAX |
| A | --- | --- | 1.10 | --- | --- | 0.043 |
| A1 | 0.00 | --- | 0.10 | 0 | --- | 0.004 |
| A2 | 0.70 | 0.90 | 1.00 | 0.027 | 0.035 | 0.039 |
| b | 0.15 | 0.20 | 0.25 | 0.006 | 0.008 | 0.01 |
| C | 0.08 | 0.15 | 0.22 | 0.003 | 0.006 | 0.009 |
| D | 1.80 | 2.00 | 2.20 | 0.07 | 0.078 | 0.086 |
| E | 2.00 | 2.10 | 2.20 | 0.078 | 0.082 | 0.086 |
| E1 | 1.15 | 1.25 | 1.35 | 0.045 | 0.049 | 0.053 |
| e | 0.65 BSC | | | 0.026 BSC | | |
| L | 0.26 | 0.36 | 0.46 | 0.010 | 0.014 | 0.018 |
| L2 | 0.15 BSC | | | 0.006 BSC | | |
| aaa | 0.15 | | | 0.01 | | |
| bbb | 0.30 | | | 0.01 | | |
| ccc | 0.10 | | | 0.00 | | |
| ddd | 0.10 | | | 0.00 | | |

9. SOLDERING FOOTPRINT



X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [MOSFET](#) category:

Click to view products by [Leshan](#) manufacturer:

Other Similar products are found below :

[614233C](#) [648584F](#) [MCH3443-TL-E](#) [MCH6422-TL-E](#) [FDPF9N50NZ](#) [FW216A-TL-2W](#) [FW231A-TL-E](#) [APT5010JVR](#) [NTNS3A92PZT5G](#)
[IRF100S201](#) [JANTX2N5237](#) [2SK2464-TL-E](#) [2SK3818-DL-E](#) [FCA20N60_F109](#) [FDZ595PZ](#) [STD6600NT4G](#) [FSS804-TL-E](#) [2SJ277-DL-E](#)
[2SK1691-DL-E](#) [2SK2545\(Q,T\)](#) [D2294UK](#) [405094E](#) [423220D](#) [MCH6646-TL-E](#) [TPCC8103,L1Q\(CM](#) [367-8430-0972-503](#) [VN1206L](#)
[424134F](#) [026935X](#) [051075F](#) [SBVS138LT1G](#) [614234A](#) [715780A](#) [NTNS3166NZT5G](#) [751625C](#) [873612G](#) [IRF7380TRHR](#)
[IPS70R2K0CEAKMA1](#) [RJK60S3DPP-E0#T2](#) [RJK60S5DPK-M0#T0](#) [APT5010JVFR](#) [APT12031JFLL](#) [APT12040JVR](#) [DMN3404LQ-7](#)
[NTE6400](#) [JANTX2N6796U](#) [JANTX2N6784U](#) [JANTXV2N5416U4](#) [SQM110N05-06L-GE3](#) [SIHF35N60E-GE3](#)