# BLC10G27XS-400AVT

**Power LDMOS transistor**

**Rev. 1 — 24 June 2021**

AMPLEON

**Product data sheet**

## 1. Product profile

### 1.1 General description

400 W LDMOS packaged asymmetric Doherty power transistor for base station applications at frequencies from 2496 MHz to 2690 MHz.

**Table 1. Typical performance**

*Typical RF performance at $T_{case}$ = 25 °C in an asymmetrical Doherty demo circuit. $V_{DS}$ = 28 V; $I_{Dq}$ = 750 mA (main); $V_{GS(amp)peak}$ = 0.9 V, unless otherwise specified.*

| Test signal | f | $V_{DS}$ | $P_{L(AV)}$ | $G_p$ | $\eta_D$ | ACPR |
|---|---|---|---|---|---|---|
| | (MHz) | (V) | (W) | (dB) | (%) | (dBc) |
| 1-carrier W-CDMA | 2496 to 2690 | 28 | 63 | 14.7 | 46.2 | –31.5 [1] |

[1] Test signal: 1-carrier W-CDMA; 3GPP test model 1; 64 DPCH; PAR = 9.9 dB at 0.01 % probability on CCDF.

### 1.2 Features and benefits

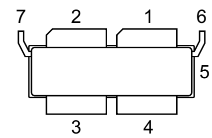
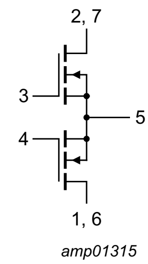
- Excellent ruggedness
- High efficiency
- Low thermal resistance providing excellent thermal stability
- Lower output capacitance for improved performance in Doherty applications
- Designed for low memory effects providing excellent digital pre-distortion capability
- Internally matched for ease of use
- Integrated ESD protection
- For RoHS compliance see the product details on the Ampleon website

### 1.3 Applications

- RF power amplifiers for base stations and multi carrier applications in the 2496 MHz to 2690 MHz frequency range

## 2. Pinning information

**Table 2. Pinning**

| Pin | Description | Simplified outline | Graphic symbol |
|---|---|---|---|
| 1 | drain2 (peak) |  |  |
| 2 | drain1 (main) | | |
| 3 | gate1 (main) | | |
| 4 | gate2 (peak) | | |
| 5 | source [1] | | |
| 6 | video decoupling (peak) | | |
| 7 | video decoupling (main) | | |

[1] Connected to flange.

## 3. Ordering information

**Table 3. Ordering information**

| Type number | Package | | |
|---|---|---|---|
| | Name | Description | Version |
| BLC10G27XS-400AVT | - | air cavity plastic earless flanged package; 6 leads | SOT1258-4 |

## 4. Limiting values

**Table 4. Limiting values**

*In accordance with the Absolute Maximum Rating System (IEC 60134).*

| Symbol | Parameter | Conditions | Min | Max | Unit |
|---|---|---|---|---|---|
| $V_{DS}$ | drain-source voltage | | - | 65 | V |
| $V_{GS(amp)main}$ | main amplifier gate-source voltage | | –6 | +9 | V |
| $V_{GS(amp)peak}$ | peak amplifier gate-source voltage | | –6 | +9 | V |
| $T_{stg}$ | storage temperature | | –65 | +150 | °C |
| $T_j$ | junction temperature | [1] | - | 225 | °C |
| $T_{case}$ | case temperature | operating [1] | –40 | +125 | °C |

[1] Continuous use at maximum temperature will affect the reliability, for details refer to the online MTF calculator.

## 5. Thermal characteristics

**Table 5. Thermal characteristics**

| Symbol | Parameter | Conditions | Typ | Unit |
|---|---|---|---|---|
| $R_{th(j-c)}$ | thermal resistance from junction to case | $V_{DS}$ = 28 V; $I_{Dq}$ = 750 mA (main); $V_{GS(amp)peak}$ = 0.9 V; $T_{case}$ = 80 °C | | |
| | | $P_L$ = 63 W | 0.27 | K/W |
| | | $P_L$ = 79 W | 0.24 | K/W |

# 6. Characteristics

**Table 6. DC characteristics**

*$T_j$ = 25 °C unless otherwise specified.*

| Symbol | Parameter | Conditions | Min | Typ | Max | Unit |
|---|---|---|---|---|---|---|
| **Main device** | | | | | | |
| $V_{(BR)DSS}$ | drain-source breakdown voltage | $V_{GS}$ = 0 V; $I_D$ = 1.44 mA | 65 | - | - | V |
| $V_{GS(th)}$ | gate-source threshold voltage | $V_{DS}$ = 10 V; $I_D$ = 144 mA | 1.6 | 2.0 | 2.4 | V |
| $V_{GSq}$ | gate-source quiescent voltage | $V_{DS}$ = 28 V; $I_D$ = 700 mA | - | 2.1 | - | V |
| $I_{DSS}$ | drain leakage current | $V_{GS}$ = 0 V; $V_{DS}$ = 32 V | - | - | 2.8 | μA |
| $I_{DSX}$ | drain cut-off current | $V_{GS}$ = $V_{GS(th)}$ + 2.37 V; $V_{DS}$ = 10 V | - | 27 | - | A |
| $I_{GSS}$ | gate leakage current | $V_{GS}$ = 9 V; $V_{DS}$ = 0 V | - | - | 280 | nA |
| $g_{fs}$ | forward transconductance | $V_{DS}$ = 10 V; $I_D$ = 7.2 A | - | 15 | - | S |
| $R_{DS(on)}$ | drain-source on-state resistance | $V_{GS}$ = $V_{GS(th)}$ + 2.37 V; $I_D$ = 5.04 A | - | 84 | 155.8 | mΩ |
| **Peak device** | | | | | | |
| $V_{(BR)DSS}$ | drain-source breakdown voltage | $V_{GS}$ = 0 V; $I_D$ = 2.62 mA | 65 | - | - | V |
| $V_{GS(th)}$ | gate-source threshold voltage | $V_{DS}$ = 10 V; $I_D$ = 262 mA | 1.6 | 2.0 | 2.4 | V |
| $V_{GSq}$ | gate-source quiescent voltage | $V_{DS}$ = 28 V; $I_D$ = 1310 mA | - | 2.1 | - | V |
| $I_{DSS}$ | drain leakage current | $V_{GS}$ = 0 V; $V_{DS}$ = 32 V | - | - | 2.8 | μA |
| $I_{DSX}$ | drain cut-off current | $V_{GS}$ = $V_{GS(th)}$ + 2.37 V; $V_{DS}$ = 10 V | - | 47 | - | A |
| $I_{GSS}$ | gate leakage current | $V_{GS}$ = 9 V; $V_{DS}$ = 0 V | - | - | 280 | nA |
| $g_{fs}$ | forward transconductance | $V_{DS}$ = 10 V; $I_D$ = 13.1 A | - | 29 | - | S |
| $R_{DS(on)}$ | drain-source on-state resistance | $V_{GS}$ = $V_{GS(th)}$ + 2.37 V; $I_D$ = 9.17 A | - | 46 | 90.1 | mΩ |

**Table 7. RF characteristics**

*Test signal: 1-carrier W-CDMA; PAR = 9.6 dB at 0.01 % probability on the CCDF; 3GPP test model 1; 1 to 64 DPCH; $f_1$ = 2492.5 MHz; $f_2$ = 2687.5 MHz; RF performance at $V_{DS}$ = 28 V; $I_{Dq}$ = 700 mA (main); $V_{GS(amp)peak}$ = 1.2 V; $T_{case}$ = 25 °C; unless otherwise specified; in an asymmetrical Doherty production test circuit at frequencies from 2490 MHz to 2690 MHz.*

| Symbol | Parameter | Conditions | Min | Typ | Max | Unit |
|---|---|---|---|---|---|---|
| $G_p$ | power gain | $P_{L(AV)}$ = 56.2 W | 12.4 | 13.3 | - | dB |
| $RL_{in}$ | input return loss | $P_{L(AV)}$ = 56.2 W | - | –11 | –7 | dB |
| $\eta_D$ | drain efficiency | $P_{L(AV)}$ = 56.2 W | 41 | 45 | - | % |
| ACPR | adjacent channel power ratio | $P_{L(AV)}$ = 56.2 W | - | –28 | –24 | dBc |

**Table 8. RF characteristics**

*Test signal: 1-carrier W-CDMA; PAR = 9.6 dB at 0.01 % probability on the CCDF; 3GPP test model 1; 1 to 64 DPCH; $f_1$ = 2492.5 MHz; $f_2$ = 2687.5 MHz; RF performance at $V_{DS}$ = 28 V; $I_{Dq}$ = 700 mA (main); $V_{GS(amp)peak}$ = 1.2 V; $T_{case}$ = 25 °C; unless otherwise specified; in an asymmetrical Doherty production test circuit at a frequency from 2490 MHz to 2690 MHz.*

| Symbol | Parameter | Conditions | Min | Typ | Max | Unit |
|---|---|---|---|---|---|---|
| $PAR_O$ | output peak-to-average ratio | $P_{L(AV)}$ = 90 W | 6.2 | 6.8 | - | dB |
| $P_{L(M)}$ | peak output power | $P_{L(AV)}$ = 90 W | 368 | 430 | - | W |

# 7. Test information

## 7.1 Ruggedness in Doherty operation

The BLC10G27XS-400AVT is capable of withstanding a load mismatch corresponding to VSWR = 10 : 1 through all phases under the following conditions: $V_{DS}$ = 30 V; $I_{Dq}$ = 750 mA (main); $V_{GS(amp)peak}$ = 0.9 V; f = 2500 MHz; $P_L$ = 169 W (5 dB OBO); with 1-carrier W-CDMA; 100 % clipping.

## 7.2 Impedance information

**Table 9. Typical impedance of main device**

*Measured load-pull data of main device; $I_{Dq}$ = 720 mA (main); $V_{DS}$ = 28 V; pulsed CW ($t_p$ = 100 μs; δ = 10 %).*

| f | $Z_S$ [1] | $Z_L$ [1] | $P_L$ [2] | $\eta_D$ [2] | $G_p$ [2] |
|---|---|---|---|---|---|
| (MHz) | (Ω) | (Ω) | (W) | (%) | (dB) |
| **Maximum power load** | | | | | |
| 2500 | 2.1 – j5.2 | 2.4 – j4.6 | 182 | 57.0 | 14.8 |
| 2600 | 3.6 – j5.4 | 2.2 – j4.5 | 182 | 55.6 | 14.7 |
| 2700 | 5.5 – j3.9 | 2.2 – j4.5 | 182 | 56.3 | 14.9 |
| **Maximum drain efficiency load** | | | | | |
| 2500 | 2.6 – j5.3 | 5.3 – j3.9 | 124 | 64.5 | 16.8 |
| 2600 | 4.2 – j5.0 | 4.1 – j3.2 | 134 | 64.1 | 16.6 |
| 2700 | 5.4 – j2.6 | 3.3 – j2.5 | 126 | 63.7 | 17.0 |

[1] $Z_S$ and $Z_L$ defined in Figure 1.

[2] At 3 dB gain compression.

**Table 10. Typical impedance of peak device**

*Measured load-pull data of peak device; $I_{Dq}$ = 1310 mA (peak); $V_{DS}$ = 28 V; pulsed CW ($t_p$ = 100 μs; δ = 10 %).*

| f | $Z_S$ [1] | $Z_L$ [1] | $P_L$ [2] | $\eta_D$ [2] | $G_p$ [2] |
|---|---|---|---|---|---|
| (MHz) | (Ω) | (Ω) | (W) | (%) | (dB) |
| **Maximum power load** | | | | | |
| 2500 | 1.4 – j4.8 | 3.2 – j4.2 | 339 | 56.5 | 14.6 |
| 2600 | 2.5 – j5.2 | 3.1 – j4.3 | 331 | 54.6 | 14.6 |
| 2700 | 4.4 – j4.5 | 3.1 – j4.2 | 318 | 53.8 | 14.8 |
| **Maximum drain efficiency load** | | | | | |
| 2500 | 1.5 – j4.8 | 3.0 – j1.9 | 258 | 64.44 | 16.5 |
| 2600 | 2.7 – j5.1 | 2.5 – j2.2 | 249 | 62.13 | 16.5 |
| 2700 | 4.4 – j4.0 | 2.1 – j2.6 | 244 | 60.28 | 16.5 |

[1] $Z_S$ and $Z_L$ defined in Figure 1.

[2] At 3 dB gain compression.

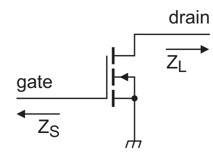



Fig 1. Definition of transistor impedance

## 7.3 Recommended impedances for Doherty design

**Table 11. Typical impedance of main device at 1 : 1 load**

*Measured load-pull data of main device; $I_{Dq}$ = 720 mA (main); $V_{DS}$ = 28 V; pulsed CW ($t_p$ = 100 $\mu$s; $\delta$ = 10 %).*

| f | $Z_S$ [1] | $Z_L$ [1] | $P_L$ [2] | $\eta_D$ [2] | $G_p$ [2] |
|---|---|---|---|---|---|
| (MHz) | (Ω) | (Ω) | (W) | (%) | (dB) |
| 2500 | 2.6 – j4.6 | 2.7 – j5.4 | 161 | 36.6 | 17.4 |
| 2600 | 3.6 – j4.8 | 2.5 – j4.9 | 168 | 35.1 | 17.4 |
| 2700 | 5.1 – j3.3 | 2.4 – j4.4 | 167 | 35.1 | 17.9 |

[1] $Z_S$ and $Z_L$ defined in Figure 1.

[2] At $P_{L(AV)}$ = 56 W.

**Table 12. Typical impedance of main device at 1 : 2.5 load**

*Measured load-pull data of main device; $I_{Dq}$ = 720 mA (main); $V_{DS}$ = 28 V; pulsed CW ($t_p$ = 100 $\mu$s; $\delta$ = 10 %).*

| f | $Z_S$ [1] | $Z_L$ [1] | $P_L$ [2] | $\eta_D$ [2] | $G_p$ [2] |
|---|---|---|---|---|---|
| (MHz) | (Ω) | (Ω) | (W) | (%) | (dB) |
| 2500 | 2.6 – j4.6 | 5.6 – j3.0 | 110 | 45.6 | 19.5 |
| 2600 | 3.6 – j4.8 | 5.7 – j3.2 | 102 | 50.4 | 19.3 |
| 2700 | 5.1 – j3.3 | 5.8 – j3.3 | 99 | 48.0 | 18.6 |

[1] $Z_S$ and $Z_L$ defined in Figure 1.

[2] At $P_{L(AV)}$ = 56 W.

**Table 13. Typical impedance of peak device at 1 : 1 load**

*Measured load-pull data of peak device; $I_{Dq}$ = 1310 mA (peak); $V_{DS}$ = 28 V; pulsed CW ($t_p$ = 100 $\mu$s; $\delta$ = 10 %).*

| f | $Z_S$ [1] | $Z_L$ [1] | $P_L$ [2] | $\eta_D$ [2] | $G_p$ [2] |
|---|---|---|---|---|---|
| (MHz) | (Ω) | (Ω) | (W) | (%) | (dB) |
| 2500 | 1.4 – j4.6 | 3.3 – j4.5 | 321 | 24.2 | 17.0 |
| 2600 | 2.3 – j5.0 | 3.1 – j4.1 | 317 | 24.5 | 17.3 |
| 2700 | 4.1 – j4.6 | 2.8 – j3.6 | 304 | 25.9 | 17.9 |

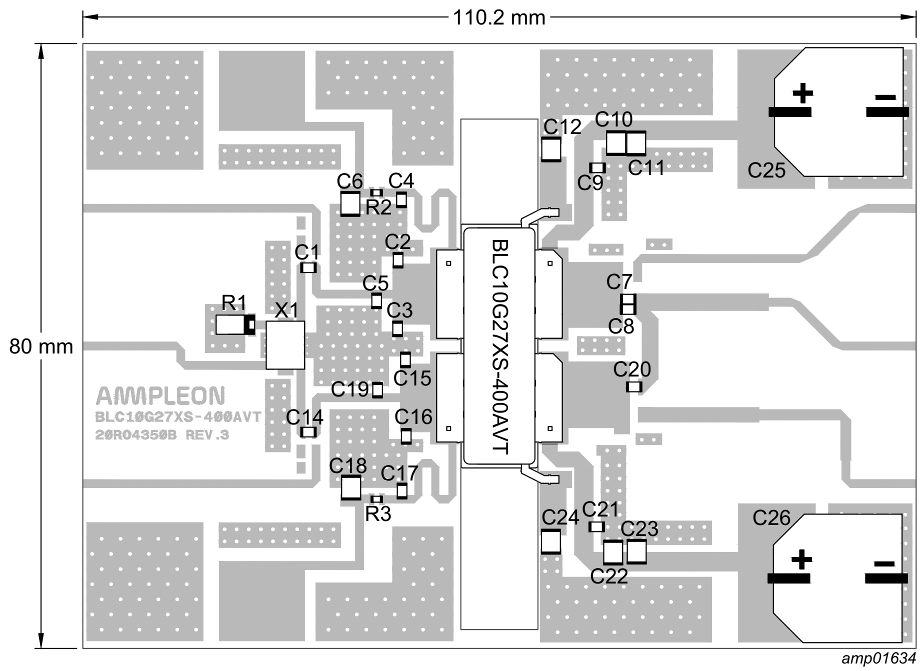
[1] $Z_S$ and $Z_L$ defined in Figure 1.

[2] At $P_{L(AV)}$ = 56 W.

**Table 14. Off-state impedances of peak device**

| f | $Z_{off}$ |
|---|---|
| (MHz) | (Ω) |
| 2500 | 1.0 – j3.0 |
| 2600 | 0.6 – j0.8 |
| 2700 | 0.4 + j0.4 |

## 7.4 Test circuit




Printed-Circuit Board (PCB): Rogers RO4350; $\varepsilon_r$ = 3.5; thickness = 0.508 mm; thickness copper plating = 35 μm.

See Table 15 for a list of components.

**Fig 2. Component layout for asymmetrical Doherty production test circuit**

**Table 15. List of components**

*For test circuit see Figure 2.*

| Component | Description | Value | Remarks |
|---|---|---|---|
| C1, C4, C14, C17 | multilayer ceramic chip capacitor | 6.8 pF | Murata: HiQ 0805 |
| C2, C3 | multilayer ceramic chip capacitor | 0.5 pF | Murata: HiQ 0805 |
| C5 | multilayer ceramic chip capacitor | 1.2 pF | Murata: HiQ 0805 |
| C6, C10, C11, C12, C18, C22, C23, C24 | multilayer ceramic chip capacitor | 10 μF, 100 V, X7S | Murata: 1210 |
| C7, C8 | multilayer ceramic chip capacitor | 2.4 pF | Murata: HiQ 0805 |
| C9, C21 | multilayer ceramic chip capacitor | 8.2 pF | Murata: HiQ 0805 |
| C15, C16 | multilayer ceramic chip capacitor | 0.9 pF | Murata: HiQ 0805 |
| C19 | multilayer ceramic chip capacitor | 0.6 pF | Murata: HiQ 0805 |

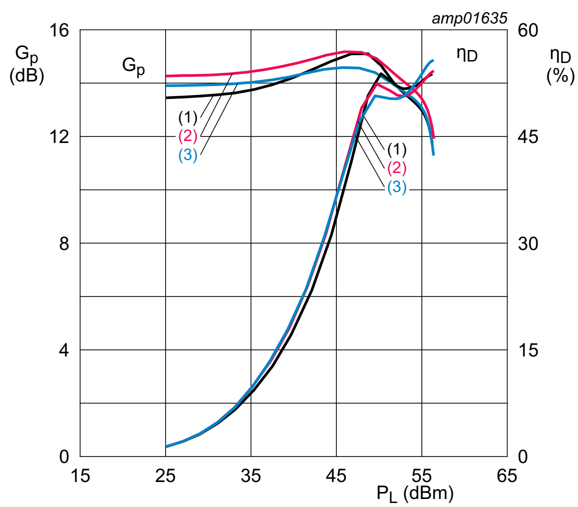
**Table 15. List of components** *…continued*

*For test circuit see Figure 2.*

| Component | Description | Value | Remarks |
|---|---|---|---|
| C20 | multilayer ceramic chip capacitor | 5.6 pF | Murata: HiQ 0805 |
| C25, C26 | electrolytic capacitor | 470 μF, 63 V | Panasonic: EEVFK1J471M |
| R1 | resistor | 50 Ω, 16 W | Anaren: C16A50Z4 |
| R2, R3 | resistor | 4.7 Ω, 1 % | SMD 0805 |
| X1 | hybrid coupler | 2 dB | Anaren: X3C25P1-02S |

## 7.5 Graphical data

### 7.5.1 Pulsed CW



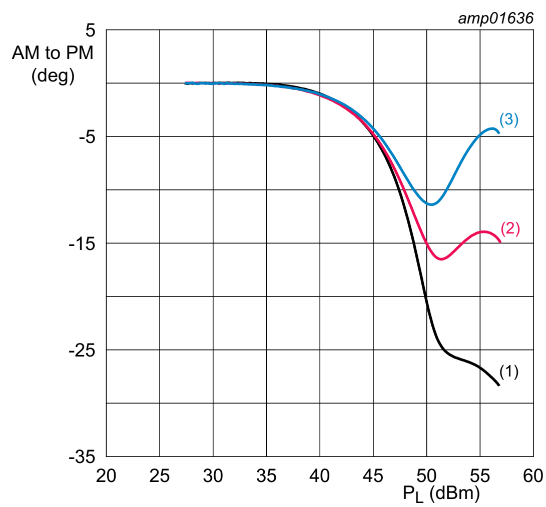

$V_{DS}$ = 28 V; $V_{GS1}$ = 2.18 V; $I_{Dq1}$ = 750 mA;
$V_{GS2}$ = 0.90 V; $t_p$ = 100 μs; δ = 10 %.

(1) f = 2490 MHz

(2) f = 2590 MHz

(3) f = 2690 MHz

**Fig 3. Power gain and drain efficiency as function of output power; typical values**




$V_{DS}$ = 28 V; $V_{GS1}$ = 2.18 V; $I_{Dq1}$ = 750 mA;
$V_{GS2}$ = 0.90 V; $t_p$ = 100 μs; δ = 10 %.

(1) f = 2490 MHz

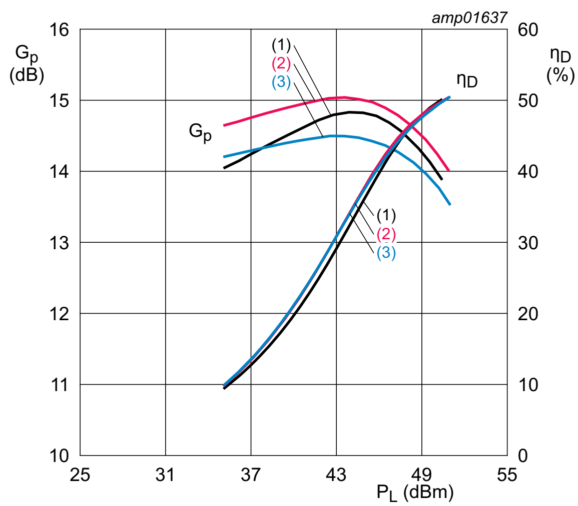
(2) f = 2590 MHz

(3) f = 2690 MHz

**Fig 4. Normalized AM to PM as a function of output power; typical values**

### 7.5.2 1-Carrier W-CDMA

Test signal: 1-carrier W-CDMA; test model 1; PAR = 9.9 dB at 0.01 % probability on CCDF.



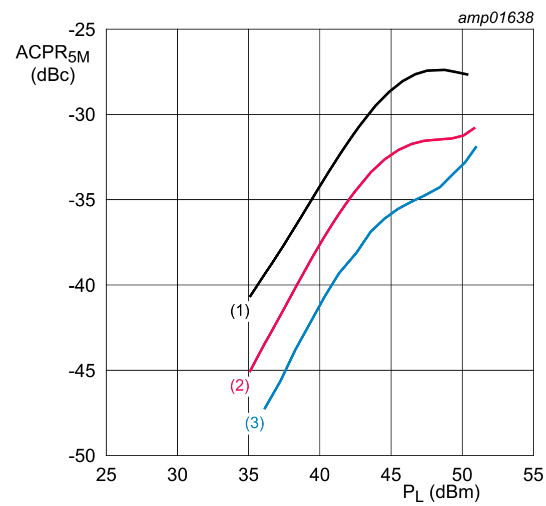

$T_{case}$ = 25 °C; $V_{DS}$ = 28 V; $V_{GS1}$ = 2.18 V; $I_{Dq1}$ = 750 mA; $V_{GS2}$ = 0.90 V.

(1) f = 2490 MHz

(2) f = 2590 MHz

(3) f = 2690 MHz

**Fig 5. Power gain and drain efficiency as function of output power; typical values**



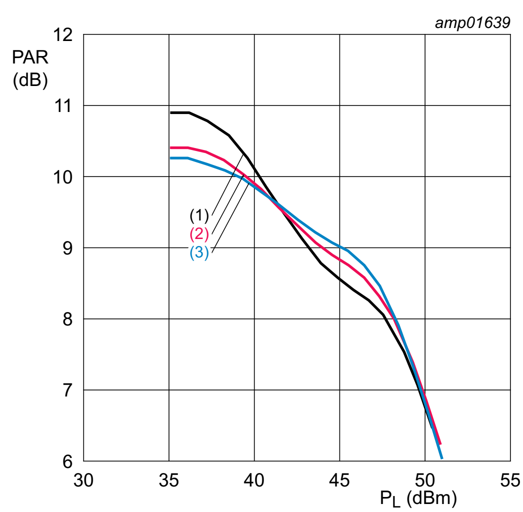

$T_{case}$ = 25 °C; $V_{DS}$ = 28 V; $V_{GS1}$ = 2.18 V; $I_{Dq1}$ = 750 mA; $V_{GS2}$ = 0.90 V.

(1) f = 2490 MHz

(2) f = 2590 MHz

(3) f = 2690 MHz

**Fig 6. Adjacent channel power ratio as a function of output power; typical values**




$T_{case}$ = 25 °C; $V_{DS}$ = 28 V; $V_{GS1}$ = 2.18 V; $I_{Dq1}$ = 750 mA; $V_{GS2}$ = 0.90 V.

(1) f = 2490 MHz

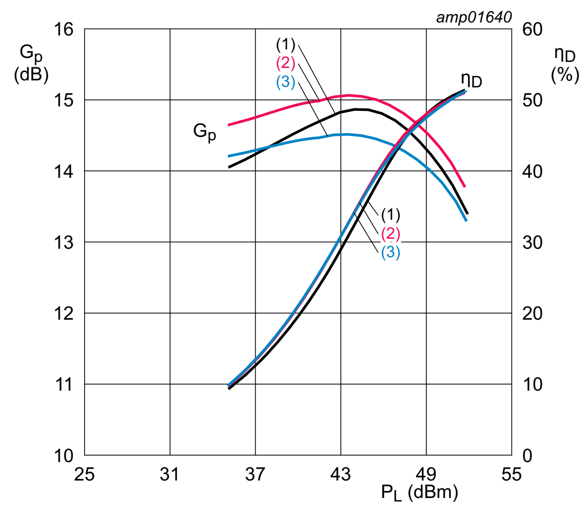
(2) f = 2590 MHz

(3) f = 2690 MHz

**Fig 7. Peak-to-average power ratio as a function of output power; typical values**

### 7.5.3 1-Carrier LTE

Test signal: 1-carrier LTE 10 MHz; PAR = 6.8 dB at 0.01 % probability on CCDF.




$T_{case}$ = 25 °C; $V_{DS}$ = 28 V; $V_{GS1}$ = 2.18 V; $I_{Dq1}$ = 750 mA; $V_{GS2}$ = 0.90 V.

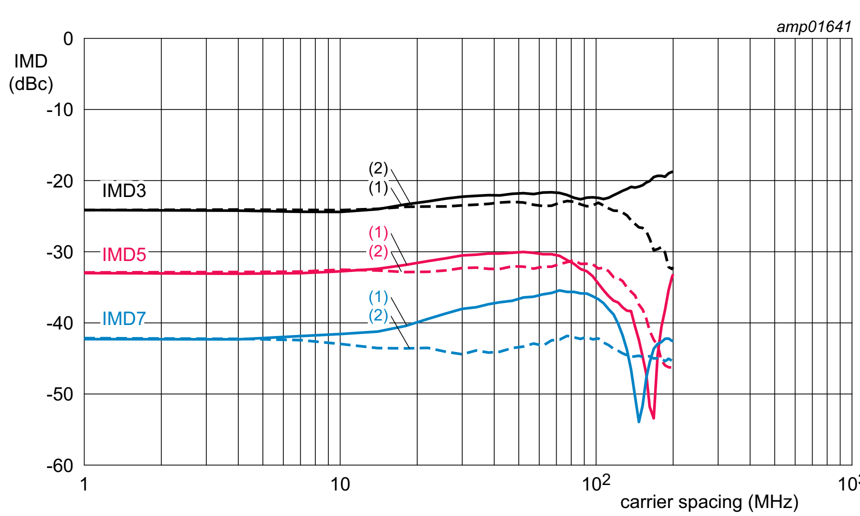
(1) f = 2490 MHz

(2) f = 2590 MHz

(3) f = 2690 MHz

**Fig 8. Power gain and drain efficiency as function of output power; typical values**

### 7.5.4 2-Tone VBW



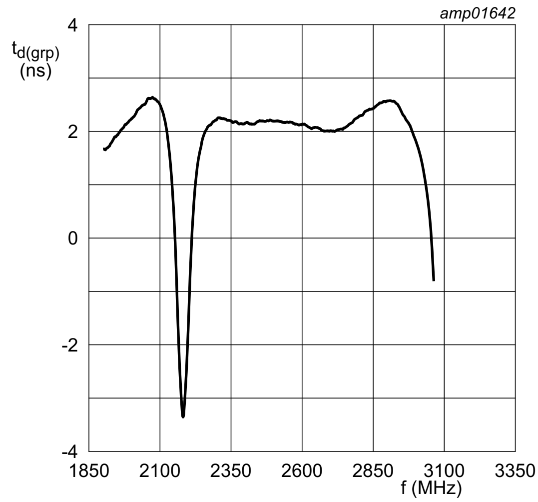

$V_{DS}$ = 28 V; $V_{GS1}$ = 2.18 V; $I_{Dq1}$ = 750 mA; $V_{GS2}$ = 0.90 V; $P_L$ = 48.0 dBm; f = 2590 MHz.

(1) IMD low

(2) IMD high

**Fig 9. VBW capability**

### 7.5.5 Group delay

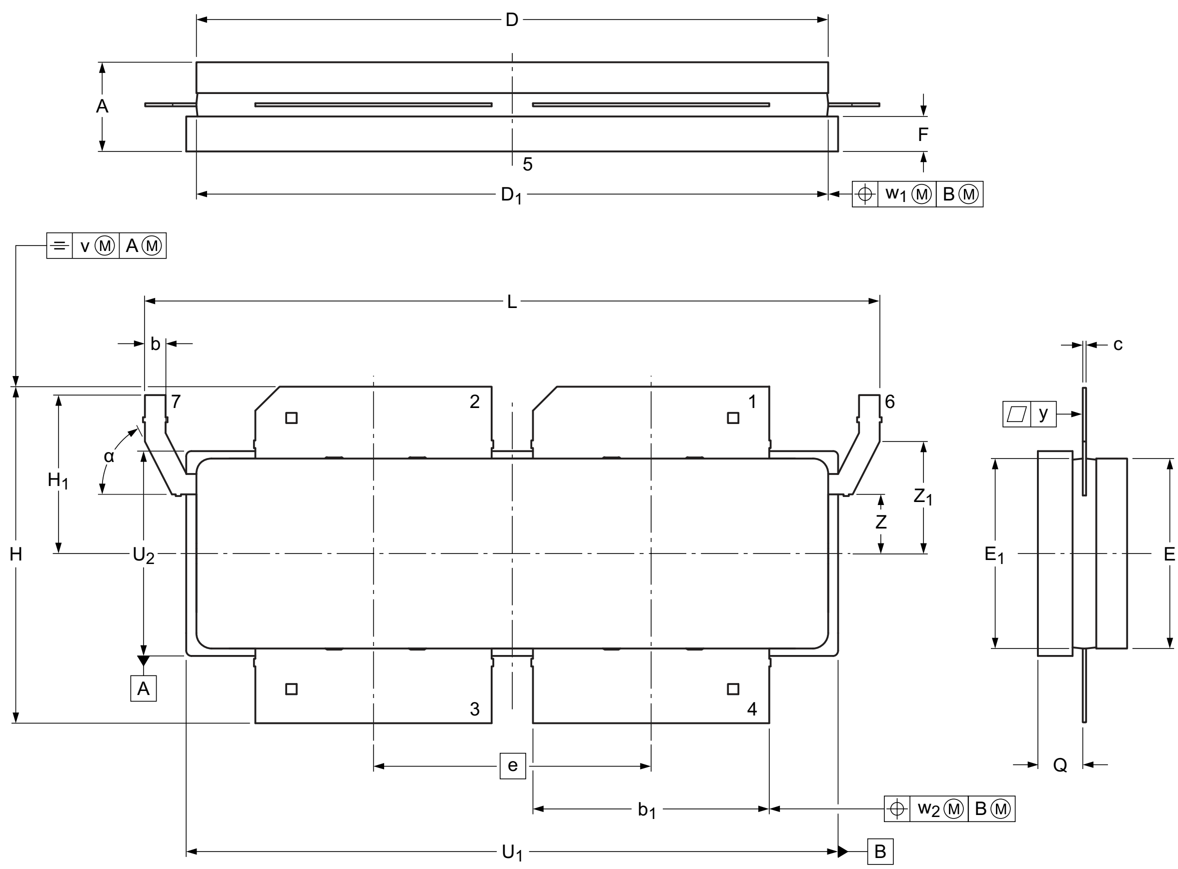



$V_{DS}$ = 28 V; $V_{GS1}$ = 2.18 V; $I_{Dq1}$ = 750 mA; $V_{GS2}$ = 0.90 V; $P_L$ = 8.4 dBm.

**Fig 10. Group delay time as a function of frequency; typical values**

# 8. Package outline

**Air cavity plastic earless flanged package; 6 leads** **SOT1258-4**




0 10 mm
scale

| y | α | Z | $Z_1$ |
|---|---|---|---|
| 0.1 | 65° | 3.17 | 5.79 |
| | 61° | 2.67 | 5.29 |

Dimensions

| Unit | | A | b | $b_1$ | c | D | $D_1$ | E | $E_1$ | e | L | F | H | $H_1$ | Q[1] | $U_1$ | $U_2$ | v | $w_1$ | $w_2$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| mm | max | 4.52 | 1.12 | 11.78 | 0.18 | 31.44 | 31.34 | 9.60 | 9.50 | | 36.42 | 1.73 | 16.71 | 8.12 | 2.25 | 32.33 | 10.23 | 0.5 | 0.5 | 0.5 |
| | nom | | | | | | | | | 13.72 | | | | | | | | | | |
| | min | 4.12 | 0.91 | 11.58 | 0.13 | 31.04 | 31.14 | 9.20 | 9.30 | | 36.22 | 1.53 | 16.51 | 7.62 | 2.03 | 32.13 | 10.03 | | | |

Note
1. Dimension Q is measured 0.1 mm away from the flange.
2. Ringframe and/or ringframe glue shall not overhang at the side of the flange.

*sot1258-4_po*

| Outline version | References | | | | European projection | Issue date |
|---|---|---|---|---|---|---|
| | IEC | JEDEC | JEITA | | | |
| SOT1258-4 | | | | | | 17-08-31 |

**Fig 11. Package outline SOT1258-4**

## 9. Handling information

**CAUTION**

This device is sensitive to ElectroStatic Discharge (ESD). Observe precautions for handling electrostatic sensitive devices.

Such precautions are described in the *ANSI/ESD S20.20*, *IEC/ST 61340-5*, *JESD625-A* or equivalent standards.

**Table 16. ESD sensitivity**

| ESD model | Class |
|---|---|
| Charged Device Model (CDM); According to ANSI/ESDA/JEDEC standard JS-002 | C3 [1] |
| Human Body Model (HBM); According to ANSI/ESDA/JEDEC standard JS-001 | 2 [2] |

[1] CDM classification C3 is granted to any part that passes after exposure to an ESD pulse of 1000 V.

[2] HBM classification 2 is granted to any part that passes after exposure to an ESD pulse of 2000 V.

## 10. Abbreviations

**Table 17. Abbreviations**

| Acronym | Description |
|---|---|
| 3GPP | 3rd Generation Partnership Project |
| CCDF | Complementary Cumulative Distribution Function |
| CW | Continuous Wave |
| DPCH | Dedicated Physical CHannel |
| ESD | ElectroStatic Discharge |
| LDMOS | Laterally Diffused Metal-Oxide Semiconductor |
| LTE | Long Term Evolution |
| MTF | Median Time to Failure |
| OBO | Output Back Off |
| PAR | Peak-to-Average Ratio |
| RoHS | Restriction of Hazardous Substances |
| SMD | Surface Mounted Device |
| VBW | Video BandWidth |
| VSWR | Voltage Standing Wave Ratio |
| W-CDMA | Wideband Code Division Multiple Access |

## 11. Revision history

**Table 18. Revision history**

| Document ID | Release date | Data sheet status | Change notice | Supersedes |
|---|---|---|---|---|
| BLC10G27XS-400AVT v.1 | 20210624 | Product data sheet | - | - |

# 12. Legal information

## 12.1 Data sheet status

| Document status[1][2] | Product status[3] | Definition |
|---|---|---|
| Objective [short] data sheet | Development | This document contains data from the objective specification for product development. |
| Preliminary [short] data sheet | Qualification | This document contains data from the preliminary specification. |
| Product [short] data sheet | Production | This document contains the product specification. |

[1] Please consult the most recently issued document before initiating or completing a design.

[2] The term 'short data sheet' is explained in section "Definitions".

[3] The product status of device(s) described in this document may have changed since this document was published and may differ in case of multiple devices. The latest product status information is available on the Internet at URL http://www.ampleon.com.

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## 14. Contents





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