

Customer Code : \_\_\_\_\_

# DATASHEET

DAPU P/N: DPBE1000002Y75NNM10001/2PY75NNM10001

| Plot             |         |          | The Label              |
|------------------|---------|----------|------------------------|
| Drew             | Audited | Approved | Stamp, please! Thanks! |
|                  |         |          |                        |
| Date: 2017.02.27 |         |          |                        |

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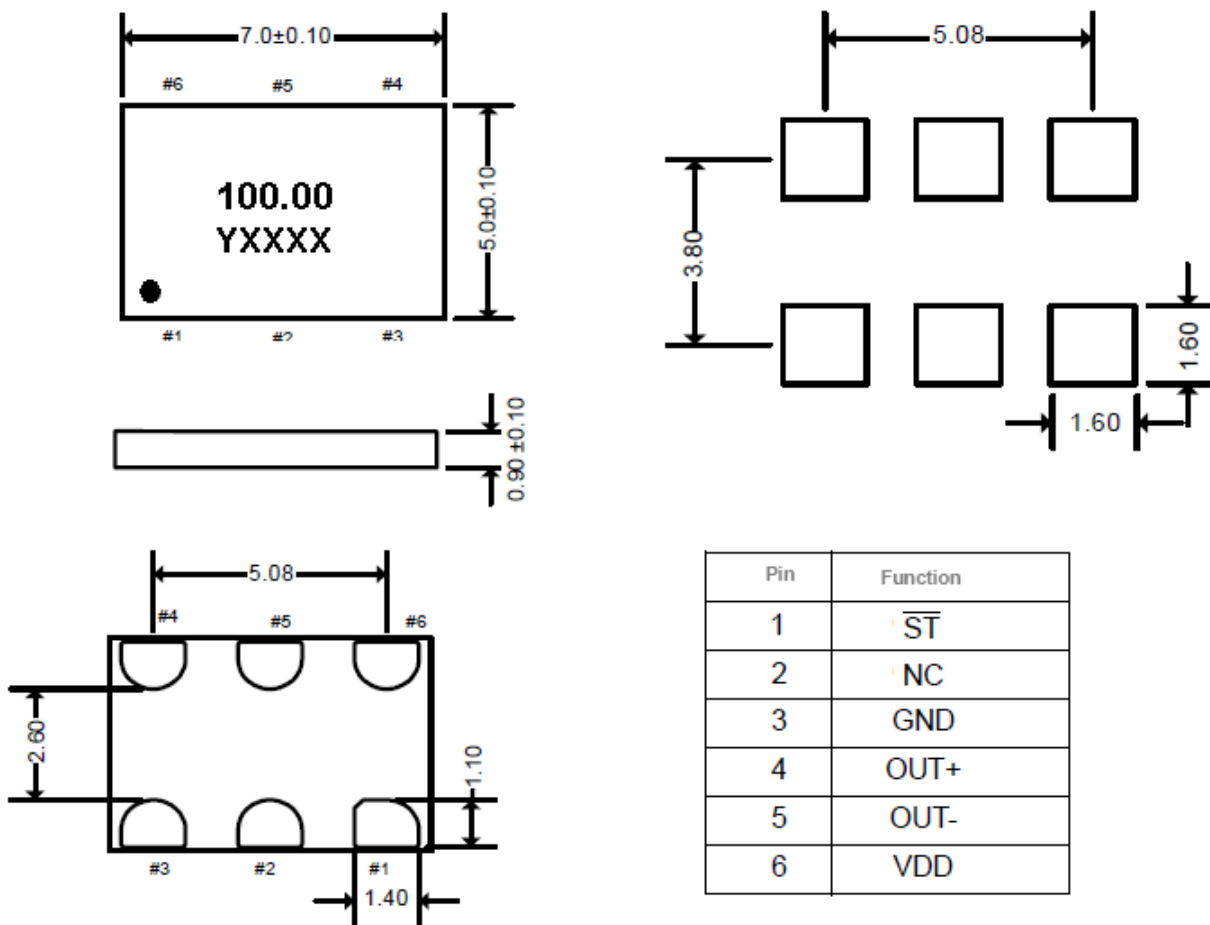
## 1、Electrical Parameters

| MODEL: DPBE1000002 |                                |           |                  |      |       |                    |   |
|--------------------|--------------------------------|-----------|------------------|------|-------|--------------------|---|
| No.                | Parameters                     | SYM.      | Electrical Spec. |      |       |                    | Notes   |
|                    |                                |           | Min.             | Typ. | Max.  | Units              |   |
| 1                  | Nominal Frequency              | FL        | 100.00           |      |       | MHz                |   |
| 2                  | Output Waveform                |           | LVDS             |      |       |                    |   |
| 3                  | Vdd                            |           | -0.5             |      | 4     | V                  |   |
| 4                  | Supply Voltage                 |           | 2.97             | 3.3  | 3.63  | V                  |   |
| 5                  | Frequency Stability            | F-stab    | -25              |      | +25   | $\times 10^{-6}$   | Inclusive of initial tolerance, operating temperature, rated power supply voltage, and load variations. |
| 6                  | Operating Temperature          | T-opr     | -40              | ~    | +85   | $^{\circ}\text{C}$ |   |
| 7                  | Storage Temperature            | T-stg     | -65              | ~    | +150  | $^{\circ}\text{C}$ |   |
| 8                  | Current Consumption            | Idd       | -                | 47   | 55    | mA                 |   |
| 9                  | OE Disable Supply Current      | I_OE      |                  |      | 35    | mA                 | OE=Low  |
| 10                 | Differential Output Voltage    | VOD       | 250              | 350  | 450   | mV                 |   |
| 11                 | Output Disable Leakage Current |           |                  |      | 1     | $\mu\text{A}$      | OE=Low  |
| 12                 | Standby Current                | I_std     |                  |      | 100   | $\mu\text{A}$      |   |
| 13                 | Rise/Full Time                 | Tr、Tf     |                  | 495  | 700   | ps                 | 20%~80%   |
| 14                 | Duty Cycle                     | DC        | 45               |      | 55    | %                  |   |
| 15                 | VOD Magnitude Change           |           |                  | -    | 50    | mV                 |   |
| 16                 | Offset Voltage                 | VOS       | 1.125            | 1.2  | 1.375 | V                  |   |
| 17                 | VOS Magnitude Change           |           |                  |      | 50    | mV                 |   |
| 18                 | Input Voltage High             | VIH       | 70%              | -    | -     | Vdd                | Pin 1   |
| 19                 | Input Voltage Low              | VIL       | -                | -    | 30%   | Vdd                | Pin 1   |
| 20                 | Input Pull-up Impedence        | Z_in      | 2                |      |       | M                  | Pin 1, ST logic low   |
| 21                 | Start up Time                  | T_start   | -                | 6    | 10    | ms                 | Measured from the time Vdd reaches its rated minimum value  |
| 22                 | First Year aging               | F_aging1  | -2               |      | +2    | $\times 10^{-6}$   | @25 $^{\circ}\text{C}$  |
| 23                 | 10-Year aging                  | F_aging10 | -5               |      | +5    | $\times 10^{-6}$   | @25 $^{\circ}\text{C}$  |
| 24                 | OE Enable/Disable Time         | T_oe      | -                | -    | 115   | ns                 |   |
| 25                 | Resume Time                    | T_resume  |                  | 6    | 10    | ms                 |   |
| 26                 | RMS Period Jitter              | T_jitt    | -                | 1.2  | 1.7   | ps                 | f = 156.25 MHz, VDD = 3.3V  |
| 27                 | Phase Period Jitter(Random)    | T_phj     | -                | 0.6  | 0.85  | ps                 | f = 156.25 MHz, Integration bandwidth = 12 kHz to 20 MHz, all Vdds                                      |



|    |                            |                          |
|----|----------------------------|--------------------------|
| 28 | Mechanical Shock           | MIL-STD-883F,Method 2002 |
|    | Mechanical Vibration       | MIL-STD-883F,Method 2007 |
|    | Temperature Cycle          | JESD22, Method A104      |
|    | Solderability              | MIL-STD-883F,Method 2003 |
|    | Moisture Sensitivity Level | MSL1 @260°C              |

## 2、Mechanical Structure(mm)



unit:mm

**Note1:** Tolerance  $\pm 0.2$ mm without mark

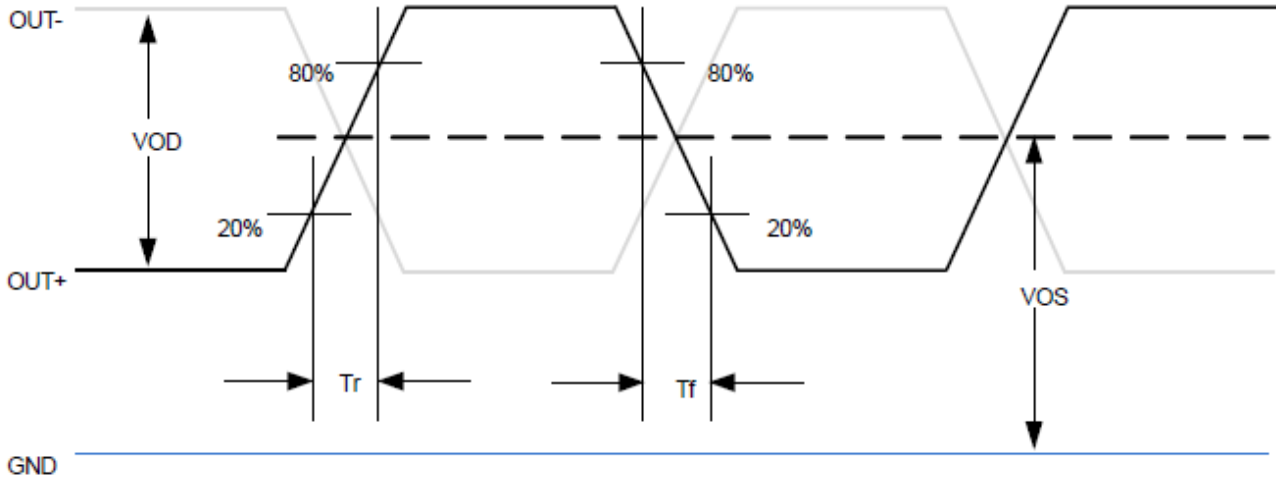
**Note2:** Referential weight 0.2g

**Note3:** Y denotes manufacturing origin and XXXX denotes manufacturing lot number. The value of "Y" will depend on the assembly location of the device

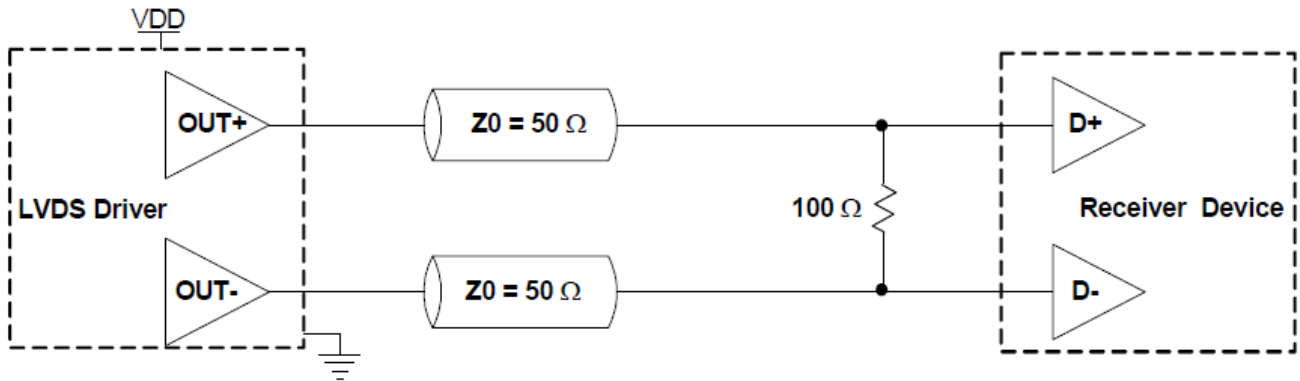
**Note4:** A capacitor of value  $0.1\mu$  F or higher between Vdd and GND is required



### 3、Waveform Diagrams



### 4、Termination Diagrams



### 5、Package: Tape & Reel (mm)

