

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

# DATASHEET

**DAPU P/N:** DPC32125M000AE0ZEB0

<b>DAPU</b>			<b>Customer Approval</b>
Drew	Audited	Approved	
Jieshu ZHENG	Jianhua LIN	Gangtao FENG	
Date : 2024/7/20			

Stamp, please! Thanks!

## Guangdong Dapu Telecom Technology Co.,Ltd

Bldg 5, SSL Modern Enterprise Accelerator Zone, Dongguan City, Guangdong Province, PRC China  
TEL : 0086-0769-88010888 FAX : 0086-0769-81800098



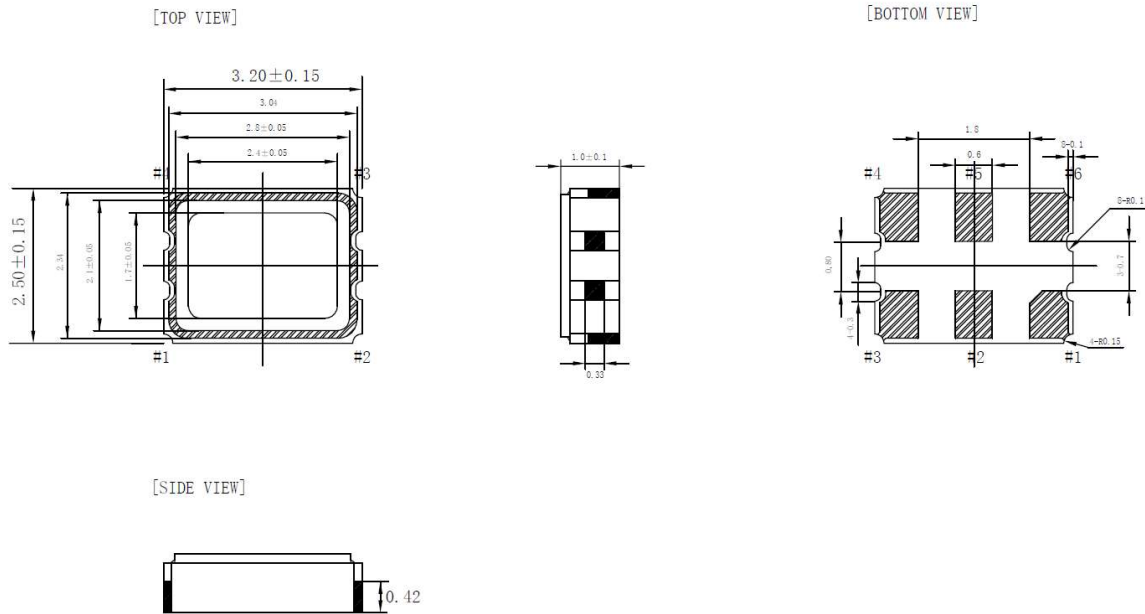
### Table of amendment

Version	Revision contents	Prepared by	Revised date
1.0	The first issued	Jieshu ZHENG	2024/7/20

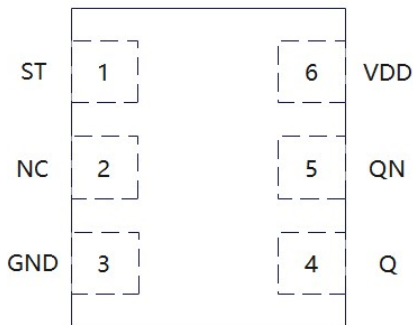
## 1、Electrical Parameter

MODEL :		DPC32125M000AE0ZEB0					
No.	Parameters	SYM.	Electrical Spec.				Notes
			Min.	Typ.	Max.	Units	
1	Nominal Frequency	FL	125.000			MHz	
2	Oscillation Mode	-	3rd				
3	Total Stability	-	-35		35	ppm	Includes initial frequency tolerance, frequency temperature coefficient, frequency voltage coefficient, Output load, 1 year aging.
4	Operating Temperature	Topr	-40		85	°C	
5	Storage Temperature	Tstg	-55		125	°C	
6	Supply Voltage	VDD	2.97	3.3	3.63	V	VDD±10%
7	Current Consumption	Idd_ST			10	uA	ST = "L"
		Idd			30	mA	ST = "H" or Floating, excluding load termination current.
8	Output waveform	-	LVDS			-	
9	Output Load	CL	100			Ω	Connected between Q and QN
10	Differential output voltage	VOD	200	300	400	mV	
11	Change in magnitude of VOD for complementary output states	VOD			50	mV	
12	Offset voltage	VOS	0.9	1.1	1.3	V	
13	Change in magnitude of VOS for complementary output states	VOS			50	mV	
14	Rise/Fall Time	Tr/Tf			1.5	ns	@20% -80%
15	Aging	-	-3		3	ppm	First Year at 25°C
16	Output Enable	-	70%VDD			V	For ST Pin
17	Output Disable	-			30%VDD	V	For ST Pin
18	Duty Cycle	-	45~55			%	
19	Start-Up Time	Tstart			10	ms	Measured from the time VDD reaches its rated minimum value.
20	Phase Jitter(RMS)			195	250	fs	12kHz to 20MHz

## 2、Mechanical Structure

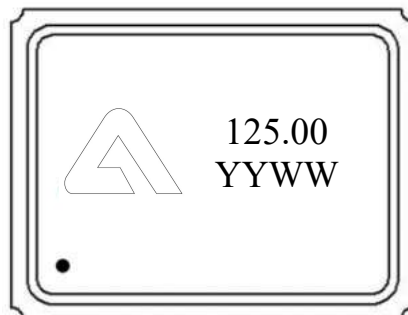


## 3、Pin Description



Pin	No	Function	
1	ST	INPUT	H or Open: Frequency Output L: Output is high impedance
2	NC	NA	No Connect: Leave it floating or connect to GND
3	GND	Power	Power Supply Ground
4	Q	Output	Oscillator Output
5	QN	Output	Complementary Oscillator Output
6	VDD	Power	Power Supply VDD

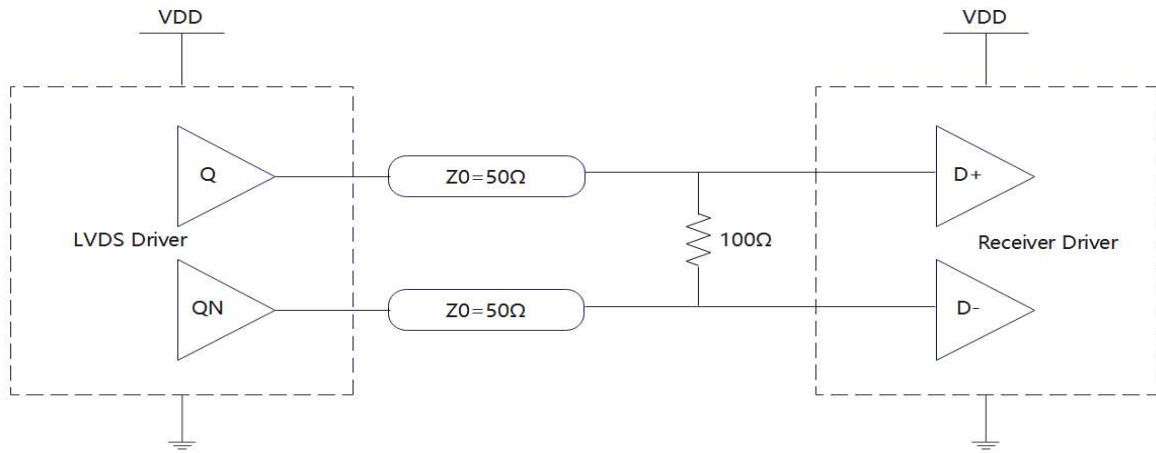
## 4、Marking



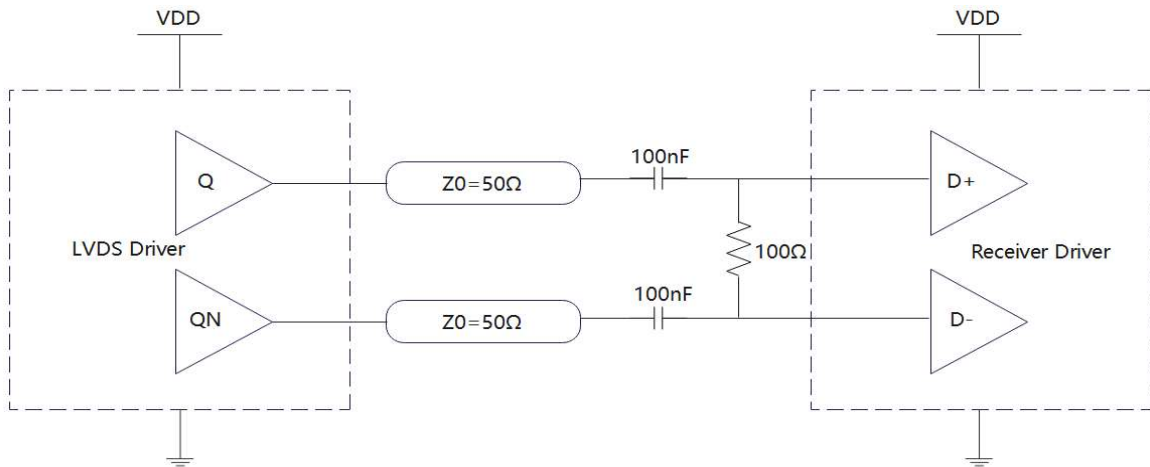
YY:Year  
 WW:Week

Pin1

### 5、 Test Circuit

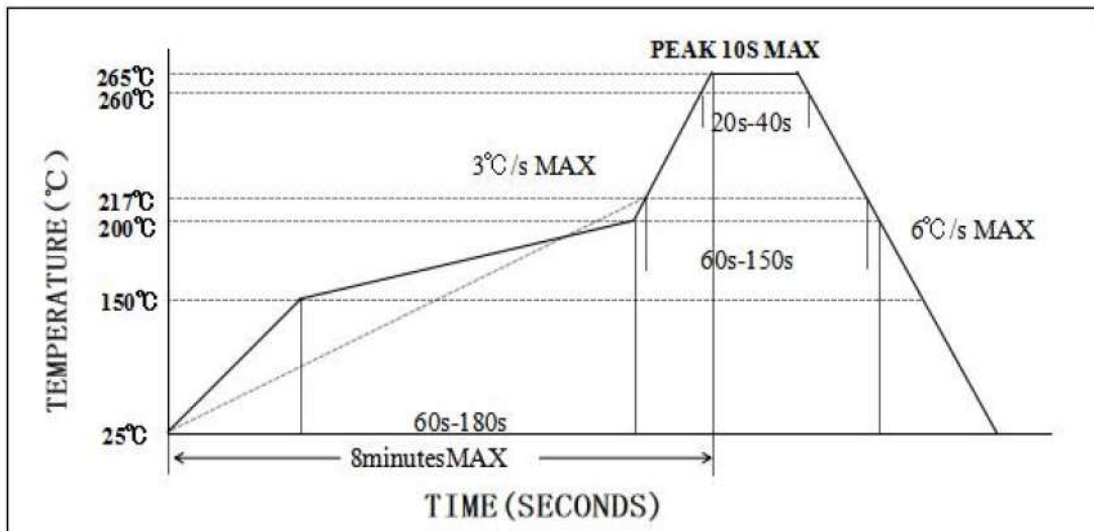


DC-Coupled LVDS

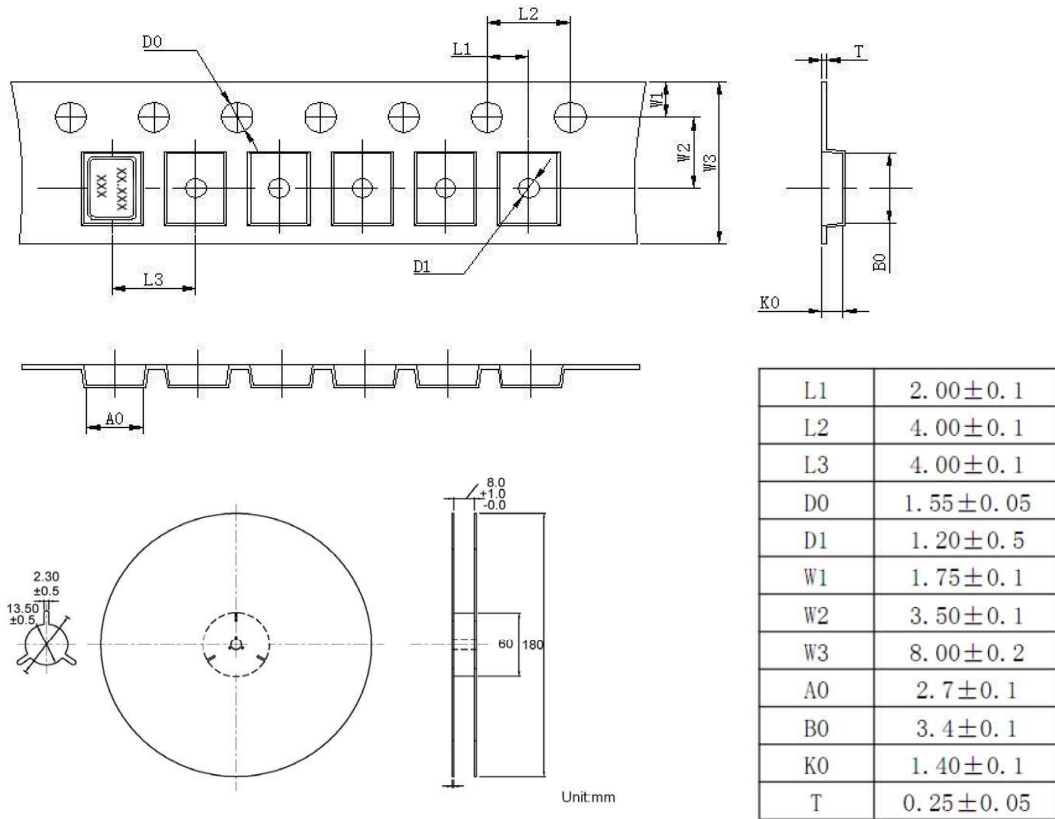


AC-Coupled LVDS

### 6、 Reflow Soldering Curve (RoHS)



## 7、 Package: Tape & Reel (mm)



## 8、 Reliability Test Specification

NO.	Test Items	Test Standard	Test Condition	Standard
1	Drop test	GB/T2423.8	Drop from 150cm height on 3cm hard wooden board for 3 times	A、 C
2	Mechanical shock	GB/T2423.5	Peak: 100g; Waveform: Half-sine; Velocity Change: 1000m/s <sup>2</sup> ; Duration: 0.5ms; 3 times/direction, Direction: +X, -X, +Y, -Y, +Z, -Z.	A、 C
3	Vibration	GB/T2423.10	Frequency: 10~2000Hz ; Vibration:20min, 1.52mm; Direction: X, Y, Z; Duration: 2 hours/direction.	A、 C
4	Solderability	IEC60068-2-58	Soldering temperature:245°C±5°C Immersion time:5 seconds ± 0.5 seconds Flux:Rosin Resin Methanol Solvent ( 1 : 4 )	E

NO.	Test Items	Test Standard	Test Condition	Standard
5	Resistance to soldering heat	IEC60068-2-58	Reflow soldering: Solder temperature 260±5°C, Immersion time:10±1S	A、 C、 D
6	High temperature storage	GB/T2423.2	Temperature: 125°C±2°C; Duration: 500±12hours;	A、 C、 D
7	Low temperature storage	GB/T2423.1	Temperature: -40°C±2°C; Duration: 500±12hours;	A、 C、 D
8	Temperature Shock	GB/T2423.22	Do 10 cycles at the following temperature	A、 C、 D
			<p>The diagram illustrates a temperature shock cycle. The temperature starts at 25 °C, drops to -55 ± 3 °C, stays there for 30 minutes, then rises to +125 ± 3 °C, stays there for 30 minutes, and returns to 25 °C. The transition times are limited to a maximum of 10 minutes. The entire sequence is labeled as '1 cycle'.</p>	
9	High temperature high humidity storage	GB/T2423.3	Temperature: 85°C±3°C; Humidity: 85%; Duration: 500hours;	A、 C、 D