

Customer Code: _____

DATASHEET

DAPU P/N: DPB32155M520AE0ZEB0

DAPU			Customer Approval
Drew	Audited	Approved	
Jieshu ZHENG	Jianhua LIN	Gangtao FENG	
Date : 2024/7/19			

Stamp, please! Thanks!

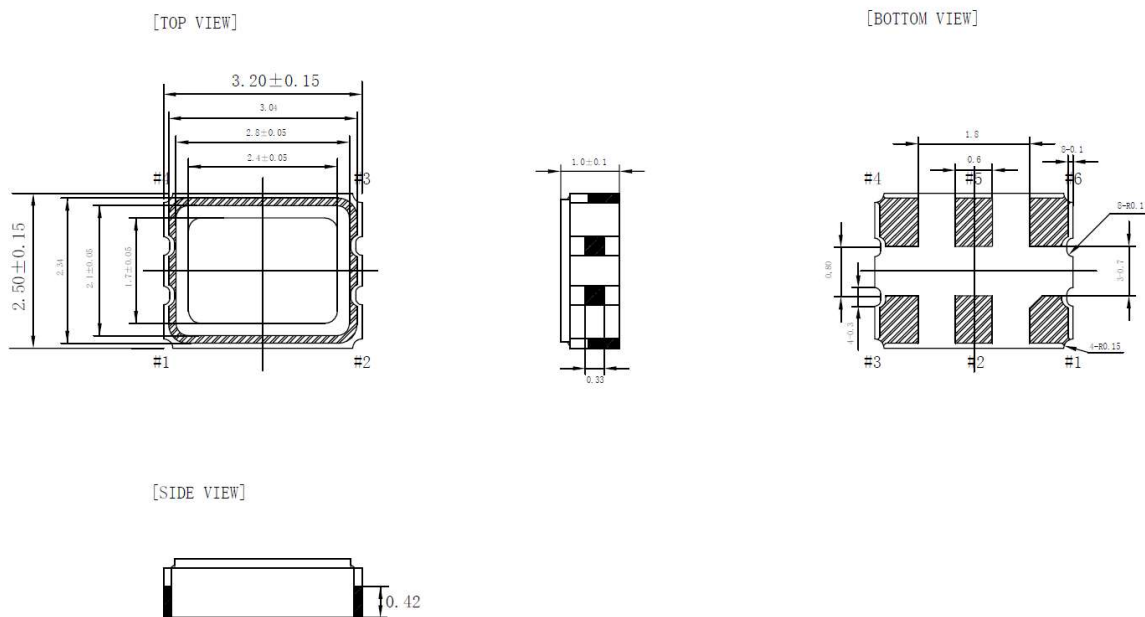
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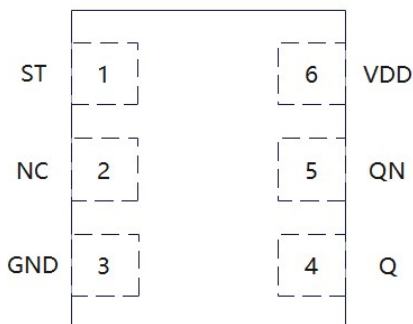
1、Electrical Parameter

MODEL :		DPB32155M520AE0ZEB0					
No.	Parameters	SYM.	Electrical Spec.				Notes
			Min.	Typ.	Max.	Units	
1	Nominal Frequency	FL	155.520			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	V _{DD} ±10%
7	Current Consumption	I _{dd_ST}			10	uA	ST = "L"
		I _{dd}			70	mA	ST = "H" or Floating, excluding load termination current.
8	Output waveform	-	LVPECL			-	
9	Output Load	CL	50			Ω	Connected between Q and QN
10	Output Voltage High	VOH	V _{cc} -1.3		V _{cc} -0.9	V	
11	Output Voltage Low	VOL	V _{cc} -2.1		V _{cc} -1.7	V	
12	Rise/Fall Time	Tr/Tf			1.5	ns	@20% -80%
13	Aging	-	-3		3	ppm	First Year at 25°C
14	Output Enable	-	70%VDD			V	For ST Pin
	Output Disable	-			30%VDD	V	For ST Pin
15	Duty Cycle	-	45~55			%	
16	Start-Up Time	T _{start}			10	ms	Measured from the time VDD reaches its rated minimum value.
17	Phase Jitter(RMS)				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

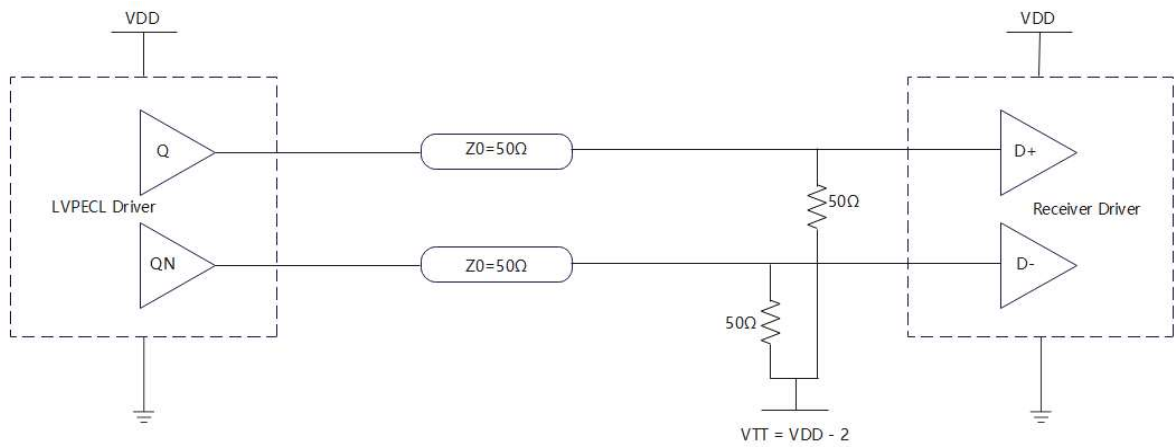
4、Marking



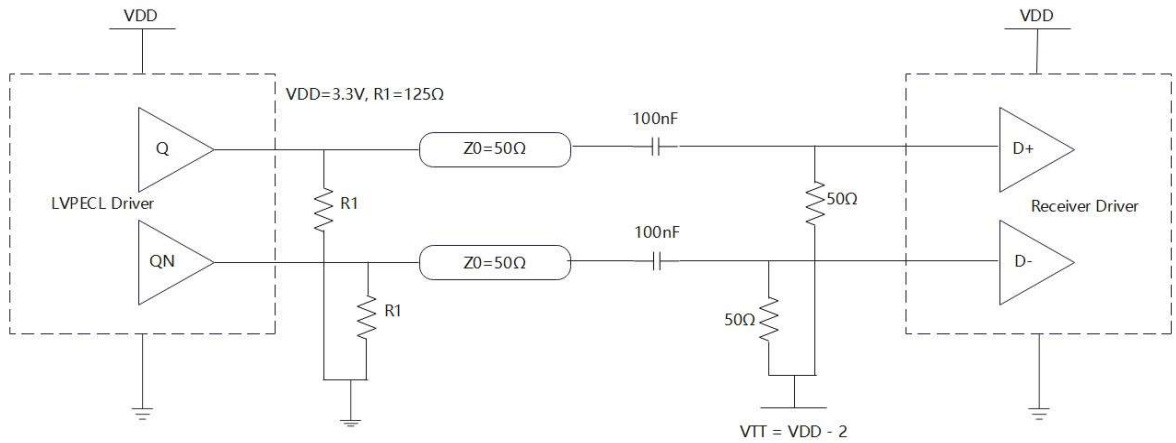
YY:Year
 WW:Week

Pin1

5、 Test Circuit

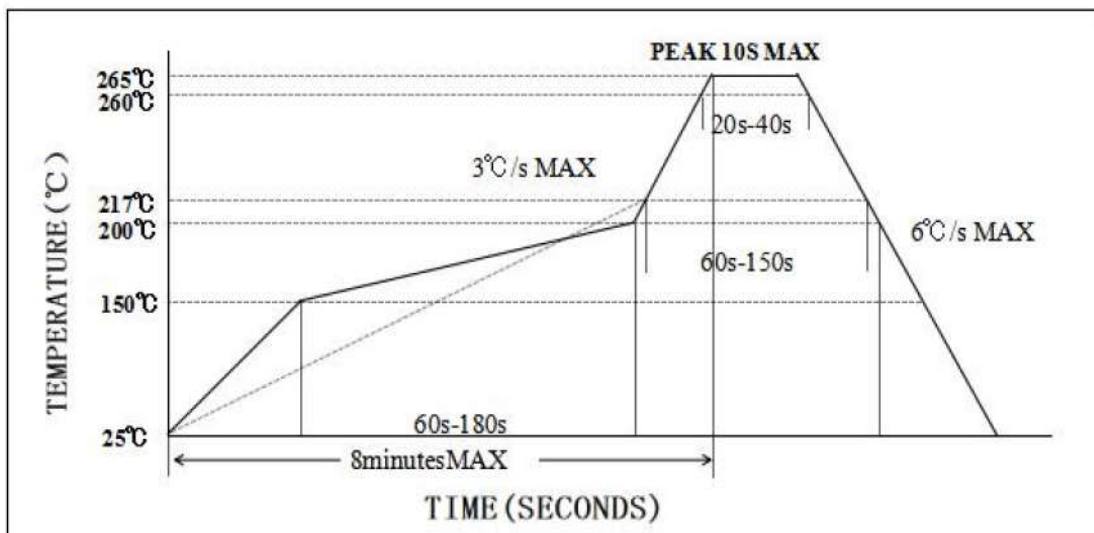


DC-Coupled LVPECL – VTT Bias

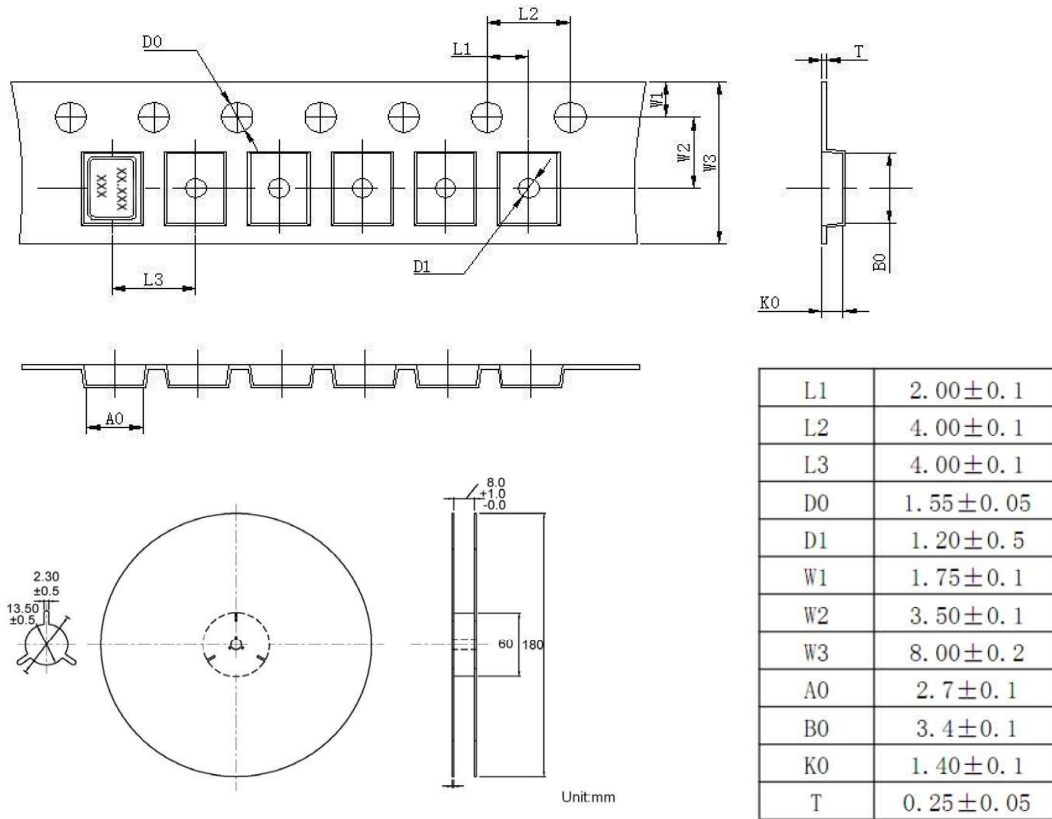


AC-Coupled LVPECL – VTT Bias

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 ² ; 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 time between the high and low temperature dwell periods is 10 minutes maximum. 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