

Travelling Merchant: _____

DATASHEET

Standard: **T75B-K319-25.00MHz-B**

P/N: _____

Plot			The Label
Drew	Audited	Approved	Stamp, please! Thanks!
Date: 2020.12.16			

Guangdong Dapu Telecom Technology Co.,Ltd

Bldg13-16,.N.Ind.Zone,SSL Industry Park, Dongguan City, Guangdong Province, China

TEL: 0086-0769-88010888 FAX: 0086-0769-81800098



Table of amendment

Version	Revision contents	Prepared by	Revised date
1.0	The first issued	<i>Amway</i>	2020.12.16



1. Electrical Parameters

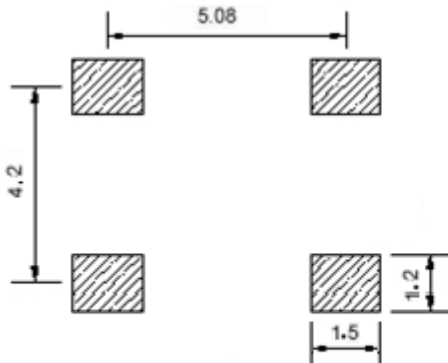
MODEL: T75B-K319-25.00MHz-B							
Item	Description	Parameters			Unit	Test Condition	
		Min.	Typ.	Max.			
Output	Frequency	25.00			MHz		
	Output Waveform	HCMOS					
	Output Low Voltage			0.33	V	$V_{cc}=3.3V, O_{load}=15\text{ pF}$	
	Output High Voltage	2.97			V	$V_{cc}=3.3V, O_{load}=15\text{ pF}$	
	Duty Cycle	45	50	55	%	@50%	
	Rise / Fall Time (10%~90%)			6	ns	@25°C	
	Start up time			2.0	ms		
	Load	15			pF		
Frequency Stabilities	Frequency Tolerance vs. Operating Temperature Range	-0.28		+0.28	$\times 10^{-6}$	T_A varied from -40°C to 85°C, measurement referenced to frequency observed with $f_{ref}=(f_{max}+f_{min})/2, V_{cc}=3.3V, O_{load}=15\text{ pF}$, temperature variable speed less than 2°C per minute.	
	Nominal Frequency Tolerance	-1.0		+1.0	$\times 10^{-6}$	Frequency at 25°C, 1 hour after reflow	
	Root allan variance			1.0	$\times 10^{-9}$	Tau=100ms	
	Frequency Drift				20	$\times 10^{-9}$ pk-pk	over 1hr after warm-up 15 min. @ fixed temp.
					40	$\times 10^{-9}$ pk-pk	over 24hrs after warm-up 1hr @ fixed temp.
	Frequency stability (Overall)	-4.6		+4.6	$\times 10^{-6}$	Inclusive of calibration @25°C, frequency stability over temperature, supply voltage $VDD\pm 5\%, \pm 10\%$ load change, reflow soldering and 20 years aging.	
Holdover	-0.32		+0.32	$\times 10^{-6}$	Including 24hrs aging, supply voltage $VDD\pm 5\%$ and frequency stability over temperature.		



Power Supply	Current Consumption			6	mA	@25°C, V _{cc} =3.3V, O _{Load} =15pF.
	Supply Voltage	3.13	3.3	3.47	V	
Phase Noise	Phase Noise			-85	dBc/Hz	10Hz
				-115		100Hz
				-138		1KHz
				-150		10KHz
				-152		100KHz
Environmental Conditions	Operable Temperature	-40		+85	°C	
	Storage Temperature	-55		+105	°C	
	ESD Level	Human Body Model,class2: 2000V to 4000V; ANSI/ESDA/JEDEC JS-001-2010.				
		Machine Model, class B: 200V to 400V; ANSI/ESDA/JEDEC JS-001-2010.				
	Moisture Sensitivity Level	Level 3.				
	Vibration	Test Condition: 0.75mm ;acceleration:10g;10Hz~2000Hz, one cycle per 30 min, test 2 hour. (3 times for each 3 directions X , Y , Z) .IEC 68-2-06 Test Fc.				
Shock	100g; 6ms; half sine wave (3 times for each 3 directions X , Y , Z),IEC 68-2-27 Test Ea/Severity 50A.					
Full Package Storage	Relative humidity (%)	20% ~ 70%				
	Temperature (°C)	-10~35°C				



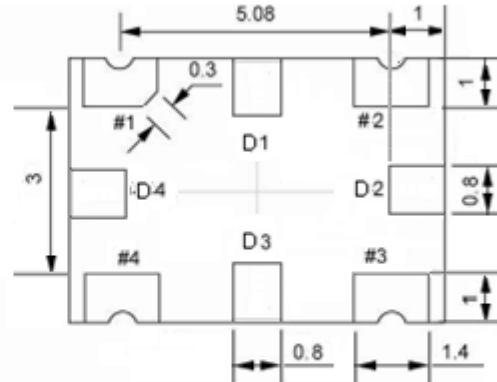
2. Mechanical Structure(mm)



Solder pad layout



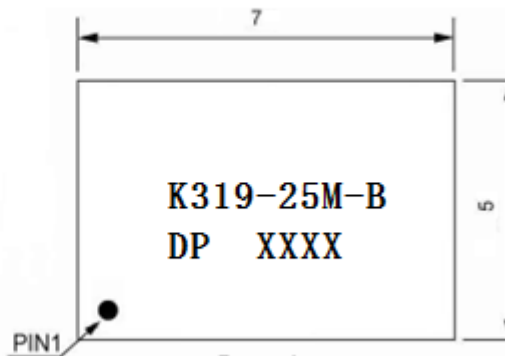
Right view



Bottom view



Side view



Top view

PIN FUNCTION

PIN	NOTATION	FUNCTION
D1, D2, D3, D4	NC	Not Connect
1	NC	Not Connect
2	GND	GND
3	OUTPUT	RF Output
4	VCC	Supply Voltage

Note1: Tolerance ± 0.2 mm without mark

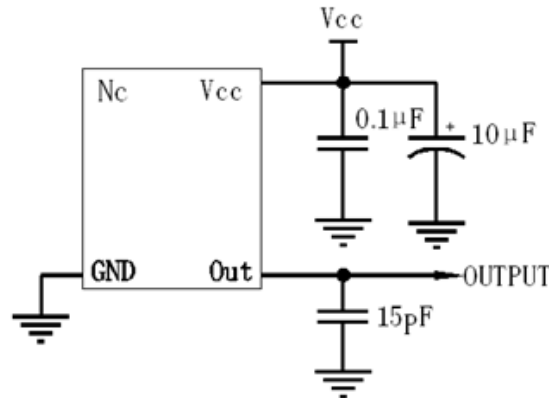
Note2: The first two xx representative: week
After two xx representative: year

Note3: Referential weight 0.2g

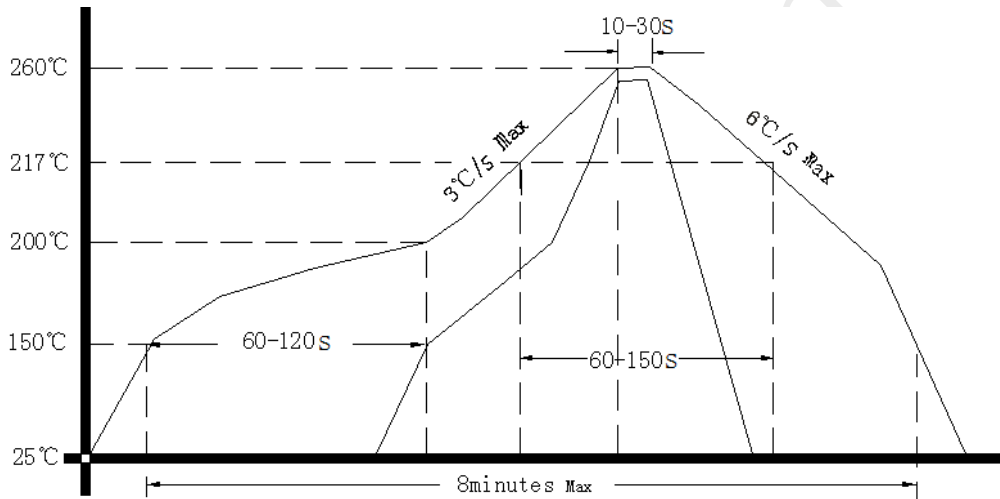
Note4: NC is not connect



3. Test circuit



4. Reflow Soldering Curve (RoHS)



Note: If soldering with a hot air gun, ensure the temperature < 320°C , soldering time < 15 seconds.

5. Package: Tape & Reel (mm)

