

Travelling Merchant: _____

DATASHEET

Standard: T75A-C819-12.80MHz

Plot			The Label
Drew	Audited	Approved	Stamp, please! Thanks!
Date: 2017.01.16			

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1. Electrical Parameters

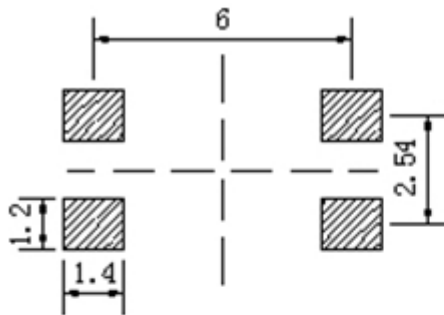
MODEL: T75A-C819-12.80MHz						
Item	Description	Parameters			Unit	Test Condition
		Min.	Typ.	Max.		
Output	Frequency	12.80			MHz	
	Output Waveform	LVCMOS				
	Output Low Voltage			0.4	V	$V_{cc}=3.3V, O_{load}=15\text{ pF}$
	Output High Voltage	2.4			V	$V_{cc}=3.3V, O_{load}=15\text{ pF}$
	Duty Cycle	45	50	55	%	
	Rise / Fall Time (10%~90%)			7	ns	@25°C
	Load	15			pF	
Frequency Stabilities	Frequency Tolerance vs. Operating Temperature Range	-0.28		+0.28	ppm	T_A varied from -20°C to 70°C, measurement referenced to frequency observed with $f_{ref}=(f_{max}+f_{min})/2, V_{cc}=3.3V, O_{load}=15\text{ pF}$.
	Initial Frequency Tolerance	-1		+1	ppm	Measurement referenced to frequency observed with $T_A=25^\circ\text{C}, V_{cc}=3.3V$, and after 5 minutes of operation, within 30 days after ex-works.
	Calibration	-4.6		+4.6	ppm	@ 25 °C, Temperature -20 °C to 70 °C, Load 15pF±5%, Ageing 20 years.
	Frequency Tolerance vs. Supply Voltage	-0.5		+0.5	ppm	measurement referenced to frequency observed $T_A=25^\circ\text{C}, V_{cc}$ varied from 3.23V to 3.37V, and $O_{Load}=15\text{ pF}$.
	Frequency Tolerance vs. Load	-0.2		+0.2	ppm	5% load change measurement referenced to frequency observed with $T_A=25^\circ\text{C}, V_{cc}=3.3V, O_{Load}=15\text{ pF}$.
	Aging Tolerance Per Day	-0.02		+0.02	ppm	$T_A=25^\circ\text{C}, V_{cc}=3.3V$, and after 1h of operation.
	Aging Tolerance 1 Year	-1		+1	ppm	
Power Supply	Current Consumption		4		mA	@25°C, $V_{cc}=3.3V, O_{load}=15\text{ pF}$.
	Supply Voltage	3.23	3.3	3.37	V	



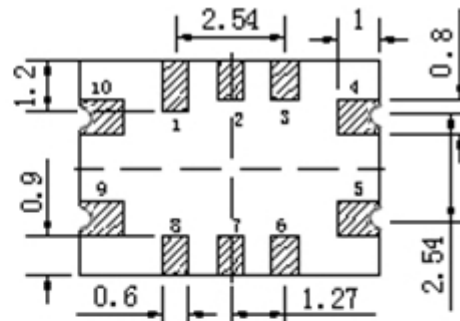
Phase Noise	Phase Noise		-90		dBc/Hz	10Hz
			-115			100Hz
			-127			1KHz
			-137			10KHz
			-143			100KHz
Environmental Conditions	Operable Temperature	-20		+70	°C	
	Storage Temperature	-55		+125	°C	
	ESD Level	Human Body Model,class2: 2000V to 4000V; ANSI/ESDA/JEDEC JS-001-2010.				
		Machine Model, class B: 200V to 400V; ANSI/ESDA/JEDEC JS-001-2010.				
	Moisture Sensitivity Level	Level 2.				
	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				



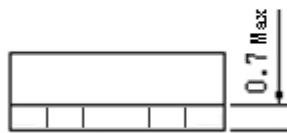
2. Mechanical Structure(mm)



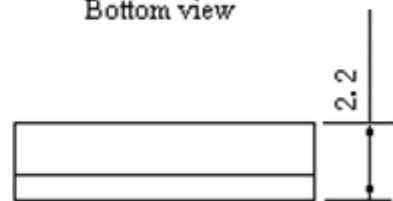
Solder pad layout



Bottom view



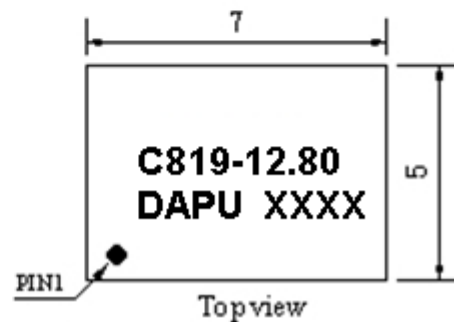
Right view



Front view

PIN FUNCTION

PIN	NOTATION	FUNCTION
1, 2, 3, 6, 7, 8	NC	Not Connect
4	GND	GND
5	OUTPUT	RF Output
9	VCC	Supply Voltage
10	NC	Not Connect

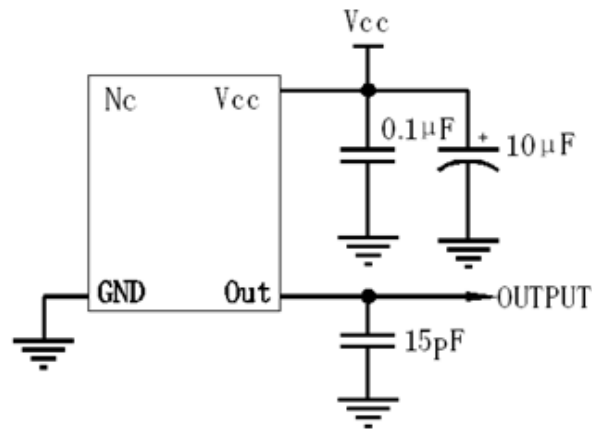


Top view

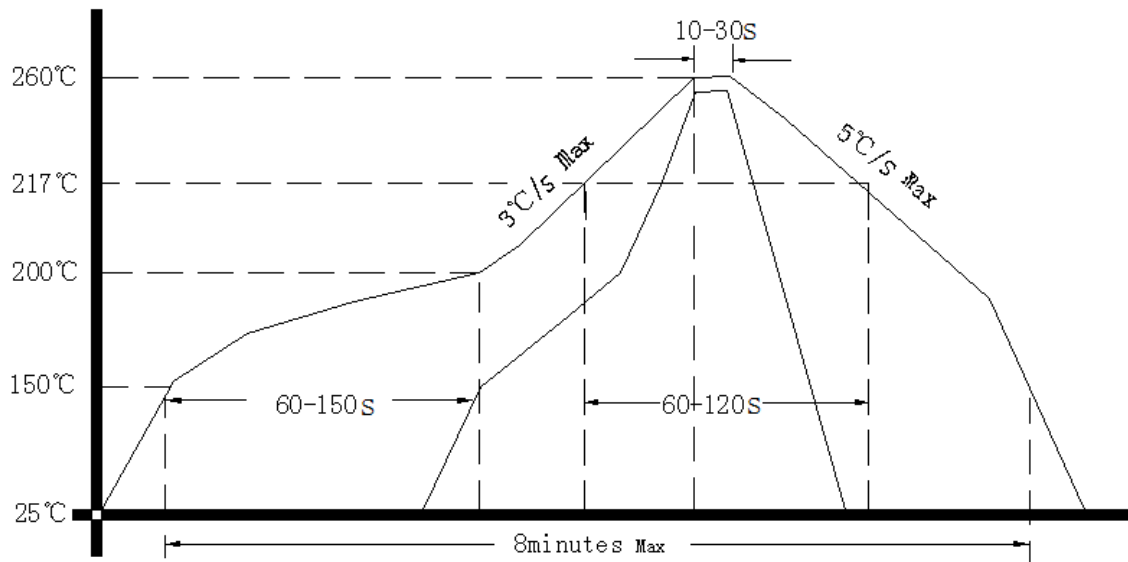
- Note1:** Tolerance $\pm 0.2\text{mm}$ without mark
- Note2:** Referential weight 0.2g
- Note3:** The first two xx representative: week
After two xx representative: year
- Note4:** NC is not connect



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)

