



Dimension (mm)	
Length:	12,5
Wide:	4,8
Height:	x



SPECIFICATION:

Frequency Range:	3,5 ~ 40,0 Mhz (Fundamental) 30 ~ 80,0 Mhz (3rd Overtone)
Operating Temperature:	.-10°C ~ +70°C
Storage Temperature:	.-40°C ~ +85°C
Frequency Tolerance	±30ppm
Drive Level	0,1mW (1mW max.)
Shunt Capacitance	7pf max.
Insulation Resistance	500M Ω Min.
Aging @ xx per Year	./- 5ppm
Load Capacitance	18pf or customer specify

Technical and Mechanical Explanation

Temperature cycling:	. +/-5ppm max. -55°C to +85°C, 3Cycles, 2hours max. Reference 25°C.
Thermal Shock:	. +85°C and -55°C. Exposure time at extreme temperature for 5 minutes, 3 cycles.
Vibration:	Frequency with an amplitude of 1,5mm sweeping between 10Hz to 55Hz within 1 minute for 2 hours minimum on each axis (x,y,z)
Drop test:	Natural drop on a hard wood board at 75cm , 3 times
Humidity:	85% RH at +85°C, 96 hours minimum
Marking permanency:	Dip units in solvents, 10strokes with brush , 3 times
Fine leak test:	Helium leak, <2E-8atm. Cc/sec.
Gross leak test:	100% in De-ionized water or Perfluorocarbon for 60s. Min.
Solderability:	Dip in solder (255°C +/- 5°C for 5 seconds. More than 95% of surface being tested should be coated uniformly with solder.
Lead bend:	Will with stand maximum bend of 90°C reference to base for 2 bends.

Serie Resistance (ESR)

Frequency Range (MHz)	3.5<f0≤4.5	4.5<f0≤6.0	6.0<f0≤8.0	8.0<f0≤12.0	12.0<f0≤15.0	15.0<f0≤18.0
ESR	120 Ω Max.	90 Ω Max.	70 Ω Max.	60 Ω Max.	40 Ω Max.	30 Ω Max.

Frequency Range (MHz)	18.0<f0≤33.0	30.0<f0≤35.0 (3.O.T)	35.0<f0≤40.0 (3.O.T)	40.0<f0≤80.0 (3.O.T)
ESR	25 Ω Max.	100 Ω Max.	80 Ω Max.	70 Ω Max.

Inclusive of initial frequency tolerances at 25°C operating temperature range, supply voltage change, load variation and 1st year aging. Please consult our sales representaion for other specifications.

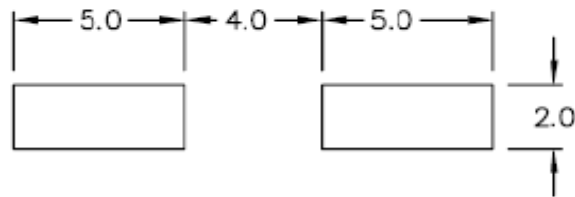
**Quarz Crystal 12,5x4,8x
H=x mm**

Part No.: **O12019**

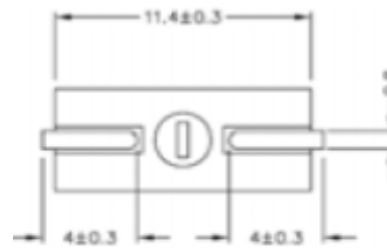
DRW:	HQ	CHKD	Wilson	MATL:	WHX	TOLERANCE	John	DATE	25.09.2017	Customer:
APPD:	YQ	HHQ		FINISH	XM		Sheet No.	1 from 4		



P.C.B Layout



Drawing



Code B = 4,4 Height
 Code C = 3,2 Height
 Code D = 3,0 Height

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APPD:	YQ	HHQ		FINISH	XM		Sheet No.	2 from 4		



Ordering Informations

Serie	Frequency	Frequency Tolerance (ppm)	Load Capacitance	Operating Temperature	Freuency Stability	Body Height	Mode	ROHS Conform	Packing
O12019	xxMxxxxx	B	D	B	B	B	1	R	TR

xMxxxxxx Mhz (max 8 Letters)	B= 30ppm	C= 12pf	A= -0°C ~ +60°C	A= +/-50ppm	B= 4,5mm	1= Funda-mental	R= Rohs Conform	BU= Bulk Ware
	C= 20ppm	D= 16pf	B= -10°C ~ +60°C	B= +/-30ppm	C= 3,2mm	3= 3th Overtone	N= NON Rohs Conform	TR= Tape Reel 1K PCS
	D= 10ppm	E= 18pf	D= -20°C ~ +70°C	C= +/-25ppm	D= 3,0mm	5= 5th Overtone		
		G= 20pf	F= -40°C ~ +85°C	D= +/-20ppm				
		H= 30pf		E= +/-15ppm				
		J= 32pf		F= +/-10ppm				
	K= 10pf							
	L= 7pf							

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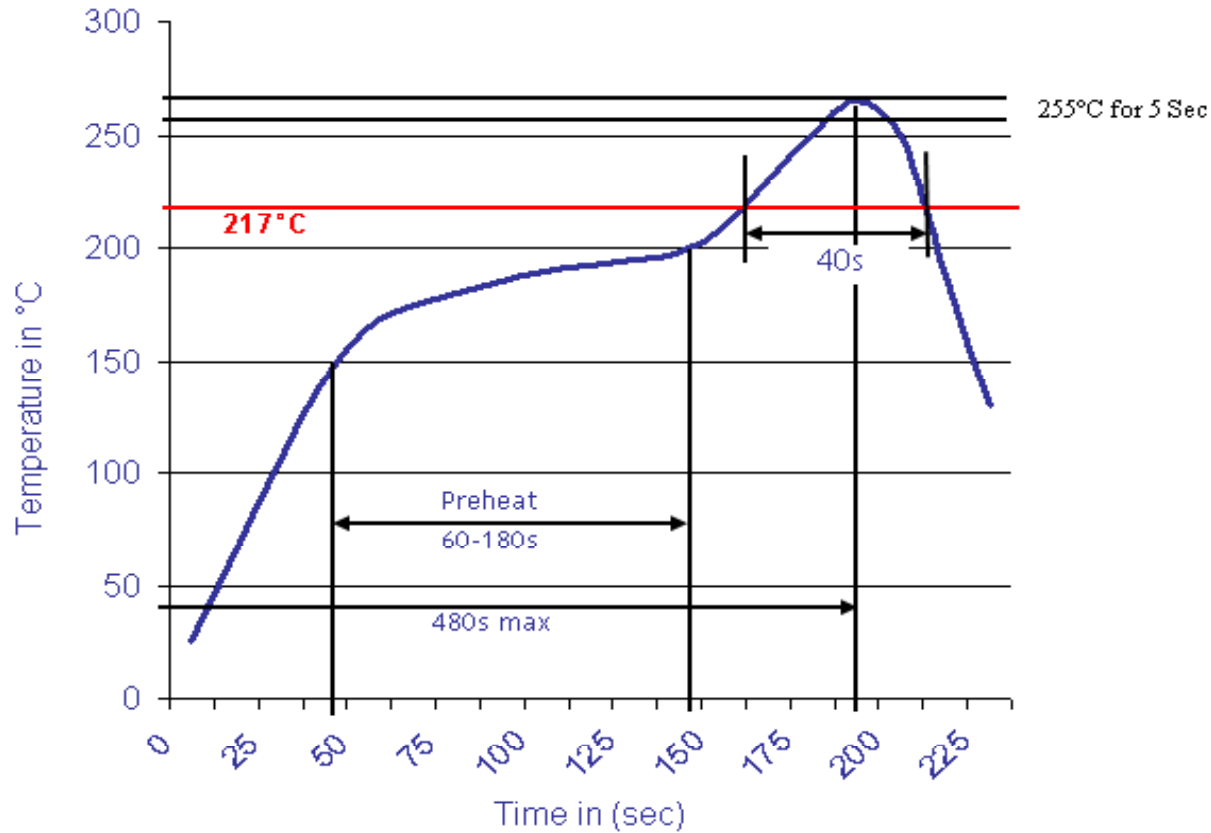
DRW:	HQ	CHKD	Wilson	MATL:	WHX	TOLERANCE	John	DATE	25.09.2017
APPD:	YQ	HHQ		FINISH	XM		Sheet No.		3 from 4

Customer:



Soldering Conditions

Classification Reflow Profile (JEDEC J-STD-020C)



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