

Compatible with Eu Directive
 2002/EC - RoHS

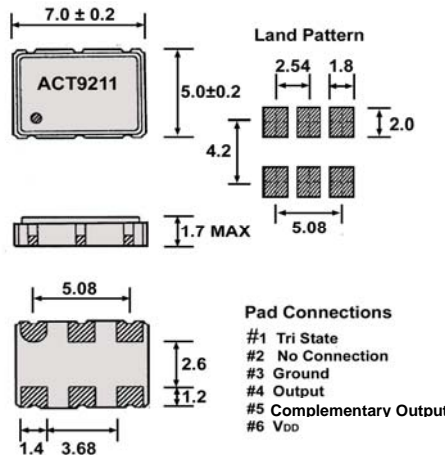
ACT9211 LVPECL or LVDS Clock Oscillator

The ACT9211 7x5mm LVPECL/ LVDS Oscillator is a miniature low profile device allowing for frequencies up to 200.0MHz to be available in a 7X5 mm SMD package utilising fundamental and 3rd overtone crystals and without employing a multiplier. The metal lid is grounded through the ceramic package and the pads are gold plated. This device is particularly suited to Communications Wireless & Networking applications and also to many other applications where an LVPECL or LVDS output is desirable. These competitively priced devices are available packaged as loose or taped and reeled parts, to suit both low and higher volume requirements.

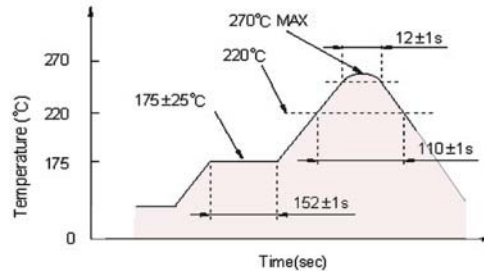


Specification

Parameter	Symbol	Specification		Condition
Frequency	f_0	9.5000MHz ~ 200.00MHz		Please specify
Operating Temp Range	T_{opt}	0~+70°C / -10~+70°C / -20~+70°C / -40~+85°C		Please specify
Storage Temp Range	T_{stg}	-55°C~+125°C		
Frequency Stability	$\Delta f/f_0$	$\pm 20, \pm 30, \pm 50$ or ± 100 ppm		Please specify
(Inclusive of Operating Temperature, Range, Supply Voltage & Load)				
Duty Cycle	T_w/t	50±10% Std, 50±5% Optional (50% of Waveform)		Please specify
Output		LVPECL	LVDS	
Supply Voltage	V_{DD}	2.5VDC ±5% & 3.3V ±5%	2.5VDC ±5% & 3.3V ±5%	Please specify
Supply Current (max)	I_{DD}	65mA max (2.5V), 80mA max (3.3V)	45mA max (2.5V), 55mA max (3.3V)	
Output Level '0'	V_{OL}	$V_{DD}-1.620V$ max	1.1V max	
Output Level '1'	V_{OH}	$V_{DD}-1.025V$ min	1.4V min	
Output Differential Voltage			247~454mV, 350mv Typical	
Offset Voltage			1.125~1.375V, 1.2V Typical	
Output Load	N/CL	$V_{DD}-2.0V_{DC}$ to 50Ω	100Ω Differential Load	
Output Enable High	Enable High	Enable Low	Enable High	# : Not for new designs No connection(default)
Output Enable Low	Disable low	Disable high	Disable Low	No connection(default)
Rise & Fall Time (max)	T_r/T_f	700pS Typical, 1.5nS max		@20~80% of Waveform
Start-up Time	T_{osc}	10mS max		
Aging	F_a	±3ppm/year max		@ 25°C
Phase Jitter		0.7ps typical 1.0ps max		(12kHz ~ 20MHz)
Period Jitter (rms)		2.0ps typical 3.0ps max		
Period Jitter(pk-pk)		20ps typical 25ps max		



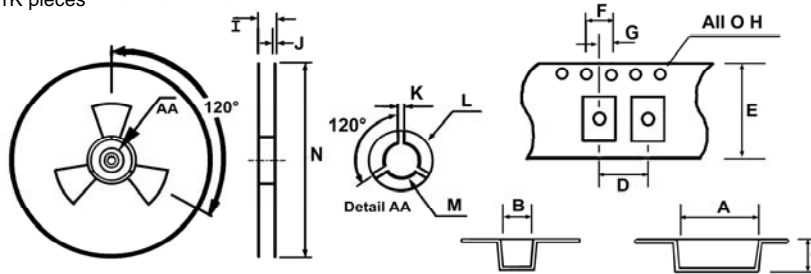
Recommended Reflow Profile



Pad Surface Finish : Au over Ni

TAPE AND REEL SPECIFICATION

Standard Reel Size 1K pieces



A	B	C	D	E	F	G	H	I	J	K	L	M	N
±0.1	±0.1	±0.1	±0.1	±0.3	±0.1	±0.05	+0.1 -0.0	+0.8 -0.0	±0.2	±0.5	±0.5	±0.5	±0.2
7.7	5.3	1.8	8.0	16.0	4.0	2.0	1.5	21.5	2.0	2.0	Ø23	Ø13	Ø330 Ø178

Please note that all parameters can not necessarily be specified in the same device

Customer to Specify : Frequency, Frequency Stability, Voltage, Operating Temperature Range, LVPECL or LVDS & Duty Cycle

In line with our ongoing policy of product evolution and improvement, the above specification may subject to change without notice

ISO9001:2000 Registered

For quotations or further information please contact us at:
 3 The Business Centre, Molly Millars Lane, Wokingham, Berks, RG41 2EY, UK

<http://www.actcrystals.com>

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