Tel : 0044 (0) 118 979 1238
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Compatible with Eu Directive 2002/EC - RoHS

ACT9210 LVPECL / PECL / LVDS OSCILLATOR

The ACT9210 PECL / LVDS Oscillator is a miniature low profile device allowing for frequencies up to 180.0MHz to be available in a 7X5 mm Surface Mount package, utilising fundamental and 3rd overtone crystals. The metal lid is grounded through the ceramic package and the pads are gold plated. This device is particularly suited to Communications / Networking applications and also to many other applications where a low voltage PECL / LVDS output is required. Only 7x5mm this device is particularly popular where board space dictates small size and / or automatic assembly is a requirement. The devices are available loose or taped and reeled to suit both low and higher volume requirements.



Specification

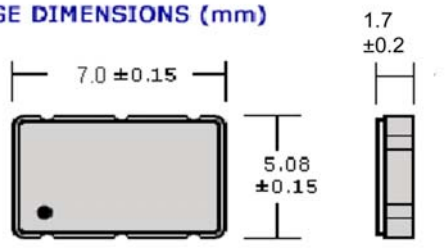
Parameter	Symbol	Specification			Condition
Frequency Range	fo	19.44MHz ~ 180.0MHz			Please specify
Frequency Stability	Df/fo	Please refer to table 1			Please specify
Temp Operating Range	Topr	0 ~ +70°C Std, -40 ~ +85°C also avail.			Please specify
Temp Storage Range	Tstg	-55 to +125°C			
Supply Voltage	VDD	2.5VDC ± 5%	3.3VDC ± 5%	5.0VDC ± 5%	
Supply Current (max)	Iop	70mA max	80mA max	120mA max	LVPECL / PECL
Duty Cycle	Tw/t	50% +/- 5% (50% of waveform)			
Output Level '0'	VOL	Vdd -1.620 V max (PECL), 1.125 V max (LVDS)			
Output Level '1'	VOH	Vdd - 1.024 V min (PECL), 1.375 V min (LVDS),			
Rise & Fall Time (max)	Tr/Tf	500ps typ., 850ps max			@ 20 ~ 80% of Waveform
		600ps typ., 850ps max			@ 20 ~ 80% of Waveform
Output Load	N/CL	Vdd - 2.0Vdc to 50Ω (LV/PECL), 100Ω differential Load (LVDS)			
Start-up Time	Tosc	10mS max			
Aging	Fa	±3ppm / year max			
Phase Jitter	Tj	1.0pS RMS max			12kHz-20MHz

Table 1 Frequency stability v (temperature, tolerance at 25°C, load, Vdd (+/-5%), and aging.)

	+/-20ppm	+/-25ppm	+/-30ppm	+/-50ppm	+/-100ppm
-10~+70°C	✦	✦	✦	✦	✦
-20~+70°C	✦	✦	✦	✦	✦
-40~+85°C		✦	✦	✦	✦

Pad surface material Au

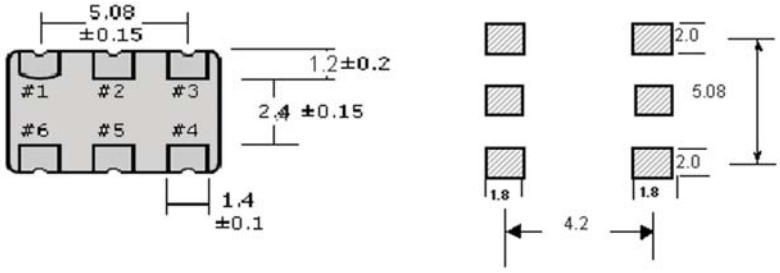
PACKAGE DIMENSIONS (mm)



Pad Connections

#1 Tri-State
#2 N/C
#3 Ground
#4 Output
#5 Complementary Output
#6 Vdd

Suggested Solder Pad Layout



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

Customer to specify :Frequency, Frequency Stability, Operating Temperature Range, Output enable, Voltage, Duty Cycle & Output type

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

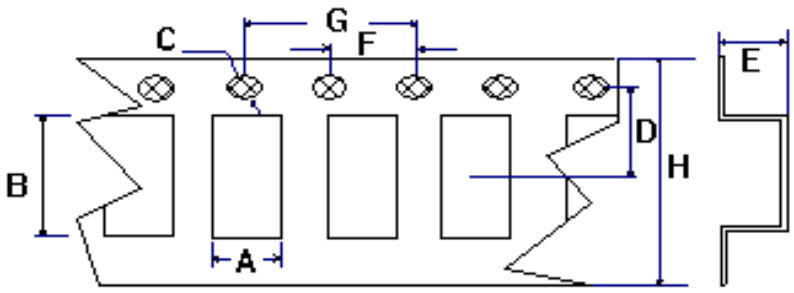
ISO9001:2000 Registered

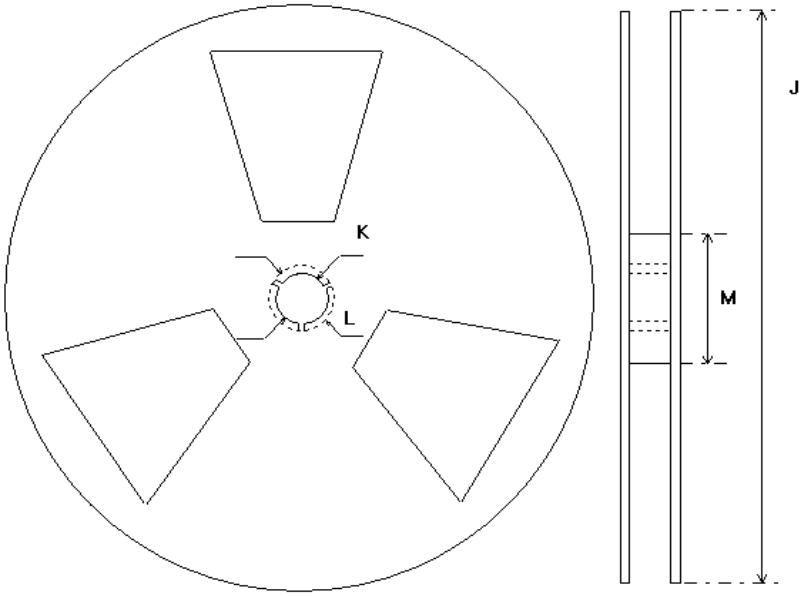
For quotations or further information please contact us at:
3 The Business Centre, Molly Millars Lane, Wokingham, Berks, RG41 2EY, UK
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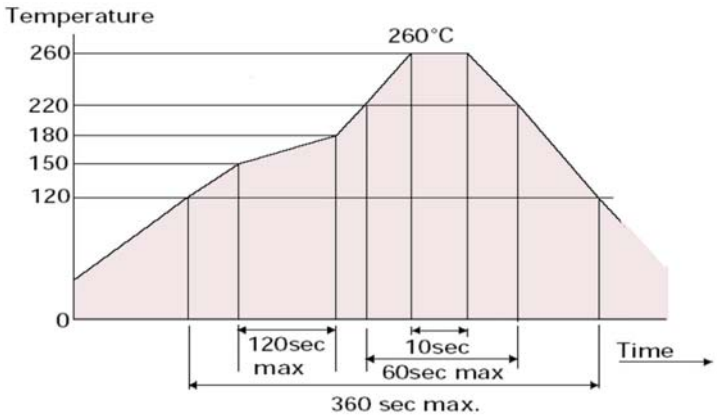
ACT9210 TAPE AND REEL DIMENSIONS (mm) 1000pieces per reel





	A	B	C	D	E	F	G	H	J	K	L	M
ACT9210	5.3	7.5	1.5	7.5	1.8	4.0	8.0	16.0	178	13	23	60

Maximum re-flow profile



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