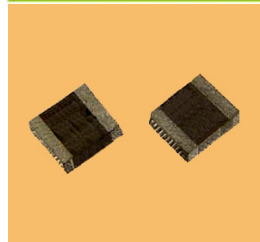


## ACT ZTACS SMD Resonators

The ACT ZTACS family comprise of a range of surface mount, ceramic resonators ("chip" type) in two pad format. This family offers a cost effective solution to those applications where a wide temperature range, accuracy, small size and surface mounting are the requirements.

Compatible with Eu Directive 2002/95/EC - RoHS  
 Contains Pb in ceramic parts exempted from article 4(f) of the directive



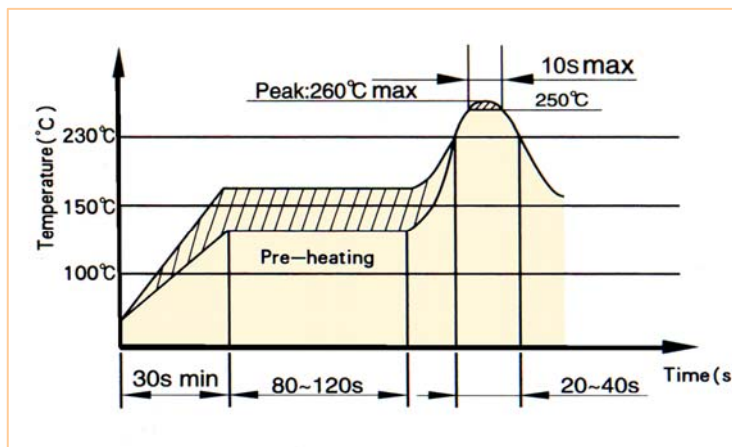
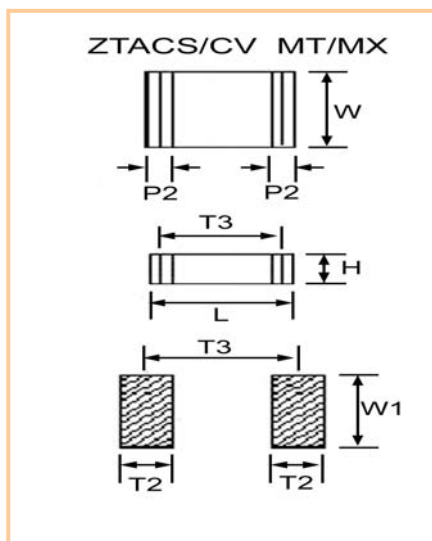
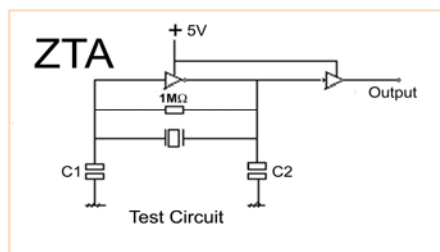
### Specification

Part Type/ Number	Frequency Range (MHz)	Test IC	Frequency Accuracy (%)	Stability over temp. range (-20 ~ +80°C)	Aging over Ten Year (%)	Capacitors (pF) (Ext. & Int.) C1 & C2
ZTACS MT	6.00 ~ 13.00	CD4069UBE x 2	± 0.5	± 0.4%	± 0.3	30 External Capacitor.
ZTACS MX	13.01 ~ 20.00					30 External Capacitor.
	20.01 ~ 25.99	74HCU04 x 2	± 0.5	± 0.4%	± 0.3	15 External Capacitor
	26.00 ~ 50.00					5 External Capacitor
	50.01 ~ 60.00					

Specification may vary from above please enquire

For frequencies from 6.0 to 8.0MHz the ZTACC MG series is recommended due to the superior characteristics.  
 Operable temperature range -25 ~ +85°C

ZTACS MG	L	W	H	P2	T2	T3	W1
	4.7±0.2	4.1±0.2	1.6±0.3	0.8±0.4	0.8±0.2	1.95±0.2	5.1±0.2



### Important note when using Ceramic resonators with micro controllers:

Some resonator parameters vary considerably with frequency and physical construction/size. These differences are too great to be able to be practically shown in a data sheet.

However, these parameters can be critical when the resonators are used with micro controllers. Even if two different resonators appear to have the same specification the typical values of these critical parameters can be considerably different. When enquiring about resonators for use with micro controllers it is important to supply the make and part number of the IC to be used and/or the list of recommended resonators, if this is given.

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

Customer to specify : Frequency, Package Type and Size

In line with our ongoing policy of product evolution and improvement, the above specification may be 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, Berkshire, RG41 2EY, UK

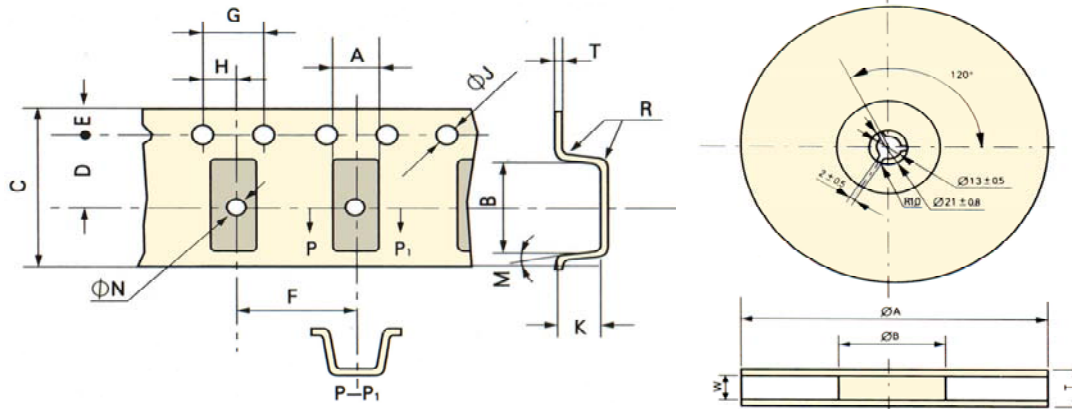
<http://www.actcrystals.com>

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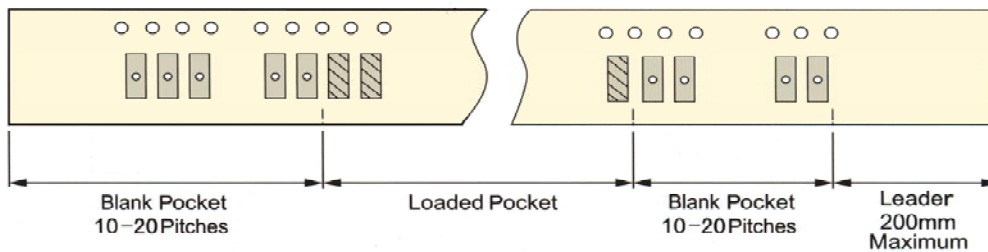
**Tape and reel dimensions (mm)**

	A	B	C	D	E	F	G	H	J	N	M	R	K	T
	±0.2	±0.2	±0.3	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	max	max	±0.2	±0.2
ACT ZTACC MG	3.8	7.8	16.0	7.5	1.8	8.0	4.0	2.0	1.5	1.6	10°	0.3	2.1	0.3
ACT ZTTCC MG	2.2	4.7	12.0	5.5	1.8	4.0	4.0	2.0	1.6	1.6	3°	0.3	1.3	0.3
ACT ZTACR MG	5.0	4.4	12.0	5.5	1.8	8.0	4.0	2.0	1.5	1.6	10°	0.3	1.8	0.3
ACT ZTTCR MG	3.4	4.0	12.0	5.5	1.8	8.0	4.0	2.0	1.5	1.6	10°	0.3	1.3	0.3
ACT ZTACV MT/MX	2.2	2.8	8.0	3.5	1.8	4.0	4.0	2.0	1.6	1.1	3°	0.3	1.3	0.2
ACT ZTTCV MT/MX														
ACT ZTACW MX														
ACT ZTTCW MX														

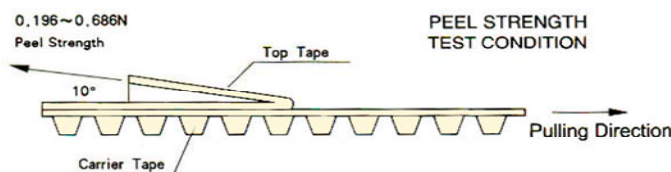


ØA	ØB	W	T	Pieces per reel	Carrier tape width
179 ±2	60 typ	8.4 min	14.0 max	3000 typ	8
179 ±2	60 typ	12.4 min	19.4 max	3000 typ	12
179 ±2	60 typ	12.4 min	19.4 max	1000 typ	12
179 ±2	60 typ	16.4 min	22.4 max	1000 typ	16
330±3	80 min	12.4 min	19.4 max	4000 typ	12
330±3	80 min	16.4 min	22.4 max	4000 typ	16

**Leader tape**



**Tape peel strength**



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