



SMD Ceramic Resonator
2 and 3 Pad Package, 3.1 mm x 3.7 mm

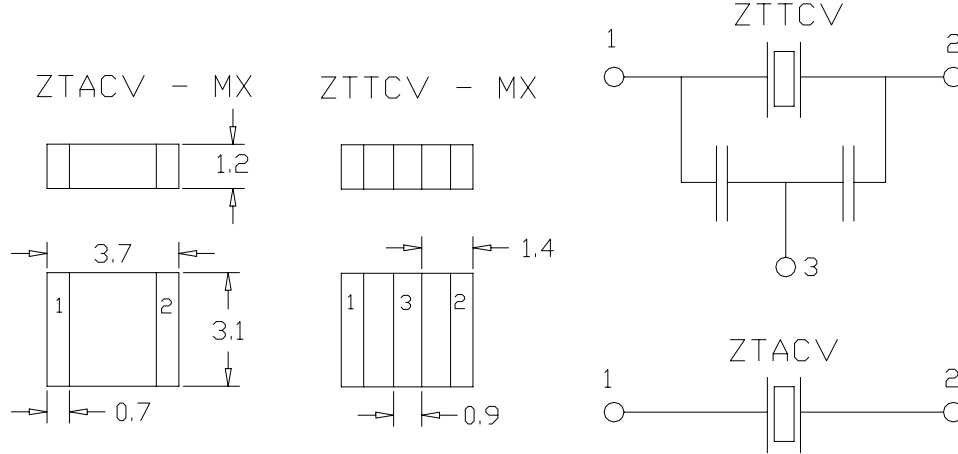
ZTACV and ZTTCV Series

Frequency Range (MHz)	7 MHz to 50 MHz
Equivalent Series Resistance (Ω)	See Table
Frequency Tolerance	$\pm 0.5\%$
Frequency Stability over Temperature	$\pm 0.3\%$
Aging	$\pm 0.3\%$ Max. for 10 Years
Temperature	
Operating	-20° C to +80° C Standard
Storage	-40° C to +85° C Standard
Environmental / Tape and Reel	See Appendix B for Environmental information, Appendix C for Tape and Reel information
Package Information	* MSL = N.A., Termination = e1

* The terminations of the ZTACV and ZTTCV series ceramic resonator are Pb free. Pb is contained in the ceramic resonator element of this device and is exempted via item 7 of the RoHS annex. This ceramic resonator series is considered RoHS compliant.

Part	Freq. (MHz)	ESR (Ω Max.)	C1 (pF)	C2 (pF)
ZTTCV-MX	13 to 19.9	40	30	30
ZTTCV-MX	20 to 25.9	40	15	15
ZTTCV-MX	26 to 50	40	5	5
ZTACV-MX	7 to 12.9	60	30*	30*
ZTACV-MX	13 to 19.9	40	30*	30*
ZTACV-MX	20 to 25.9	40	15*	15*
ZTACV-MX	26 to 50	40	5*	5*

* Recommended external capacitance, not internal to the device.



Dimension Units: mm

Part Number Guide	Sample Part Number: ZTACV - MX - 16.00	
Part Series	Package Code	Frequency
ZTACV -	MX	- 16.00 MHz