

TUNING FORK QUARTZ CRYSTAL UNIT IN CERAMIC SEAM SEAL SMD PACKAGE, SIZE 3.2 X 1.5MM.

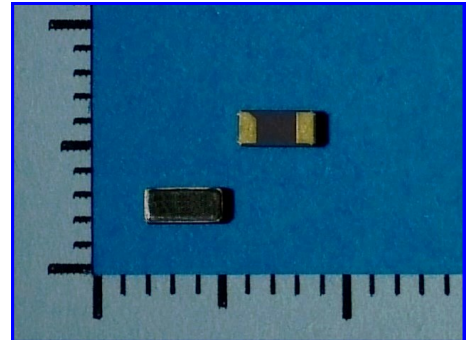
01-CR3-07

PRODUCT FEATURES

- SMALL SIZE PACKAGE SIZE 3.2 X 1.5 X 0.8MM WITH 2 PADS.
- HIGHLY RELIABLE AND LOW AGING CRYSTAL IN HERMETICALLY SEALED PACKAGE.
- EXCELLENT HEAT AND SHOCK RESISTANCE.
- PERFECT FOR SMT AND LEAD-FREE REFLOW PROCESS.

APPLICATIONS

- REAL TIME CLOCKS
- PORTABLE DEVICES
- TIMING DEVICES

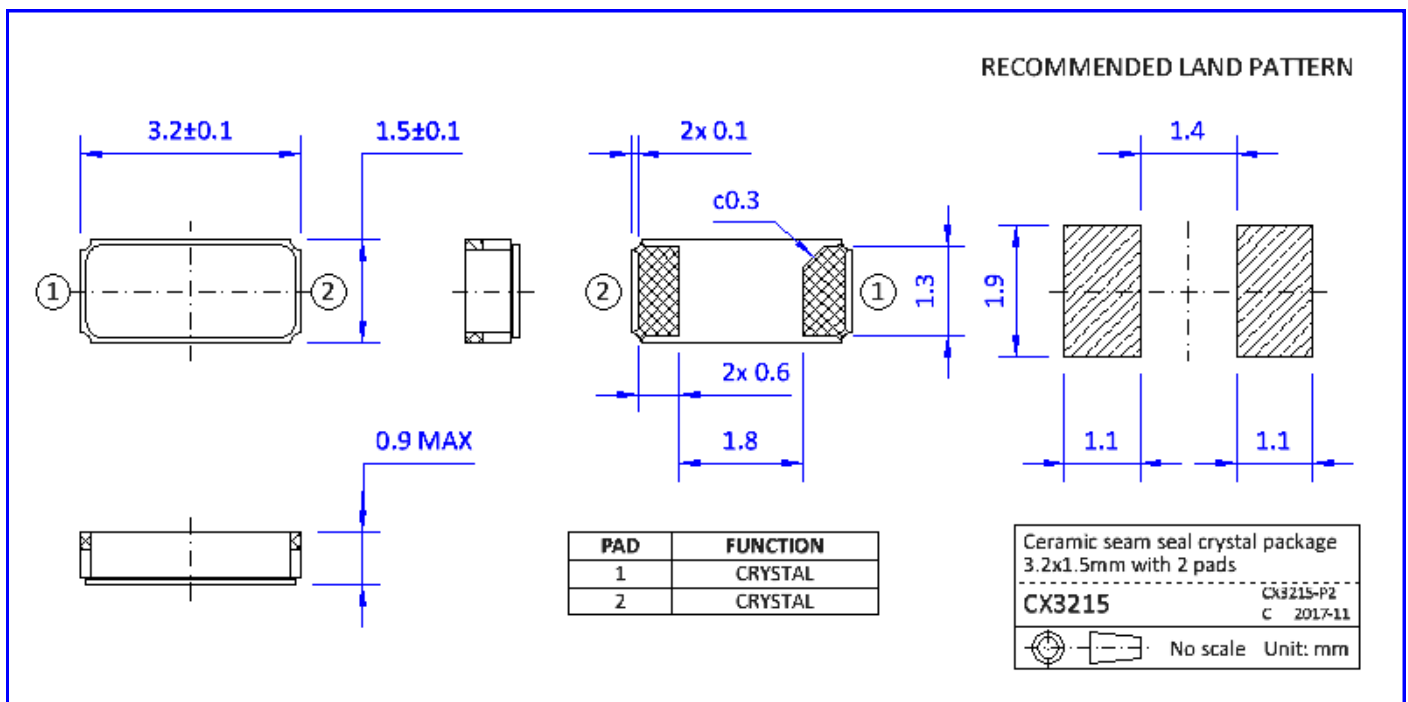


PRODUCT SPECIFICATIONS

PARAMETER	SYMBOL	SPECIFICATIONS	REMARKS
FREQUENCY	F_N	32.768kHz	—
OPERATION MODE	—	FUNDAMENTAL	—
FREQUENCY TOLERANCE	$\Delta f/f$	$\pm 10\text{PPM}, \pm 20\text{PPM}, \pm 30\text{PPM}, \pm 50\text{PPM}$	OTHER OPTIONS AVAILABLE
TEMPERATURE COEFFICIENT	K	$-0.03\text{PPM}/\Delta^\circ\text{C}^2$	SEE NOTE 1
TURNOVER POINT TEMPERATURE	T_{TP}	$+25\pm 5^\circ\text{C}$	SEE NOTE 2
OPERATING TEMPERATURE RANGE	T_{OP}	$-40^\circ\text{C} \sim +85^\circ\text{C}$ UP TO $+125^\circ\text{C}$	OTHER OPTIONS AVAILABLE
LOAD CAPACITANCE	CL	6pF, 7pF, 9pF, 12.5pF	PLEASE SPECIFY LOAD CAPACITANCE
EQUIVALENT SERIES RESISTANCE	ESR	70k Ω MAX	@+25 $^\circ\text{C}$
SHUNT CAPACITANCE	C_0	1.0pF TYP, 2.0pF MAX	—
MOTIONAL CAPACITANCE	C_1	3.2fF TYP, 5.0fF MAX	—
QUALITY FACTOR	Q	30,000 TYP	—
DRIVE LEVEL	DL	0.1 μW TYP, 1.0 μW MAX	—
AGING FIRST YEAR	$\Delta f/y_1$	$\pm 3\text{PPM}$	@+25 $^\circ\text{C}$
STORAGE TEMPERATURE RANGE	T_{ST}	$-55^\circ\text{C} \sim +125^\circ\text{C}$	—

NOTE 1: THE TEMPERATURE COEFFICIENT IS THE CONSTANT OF THE PARABOLIC CURVATURE WHICH THE FREQUENCY DESCRIBES OVER OPERATING TEMPERATURE RANGE.
 NOTE 2: THE TURNOVER TEMPERATURE DESCRIBES THE LOCATION OF THE TURNING POINT OF THE PARABOLIC FUNCTION.

MECHANICAL DIMENSIONS



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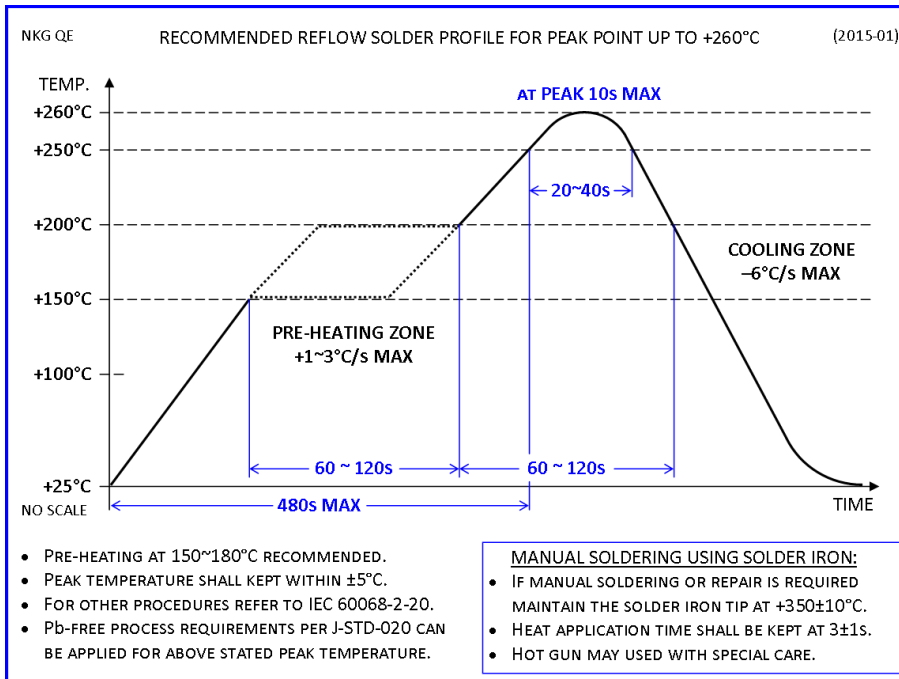
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ENVIRONMENTAL COMPLIANCE INFORMATION

- ROHS 6/6 COMPLIANT (DIRECTIVE 2011/65/EC) AND LEAD-FREE.
- COMPLIANT TO ROHS 2/3 (DIRECTIVE 2015/863) (ALSO CALLED ROHS 10).
- HALOGEN-FREE PER DEFINITION OF IEC 61249-2-21 2033.
- NONE-USE OF SVHCs PER REACH IS CURRENTLY GIVEN, CONTINUOUSLY MONITORED AND UPDATED AS THE COMMISSION ISSUES NEW RELEASES.
- PRODUCT DOES NOT CONTAIN ANY PHTHALATES (PHS).
- PRODUCT DOES NOT CONTAIN PVC (POLYVINYL CHLORIDE).
- PRODUCT DOES NOT CONTAIN PFOS/PFOA NOR BEING SAME USED TO MANUFACTURE THE COMPONENTS OF THIS PRODUCT.
- MOISTURE SENSITIVITY LEVEL (MSL) 1 PER J-STD-020C.

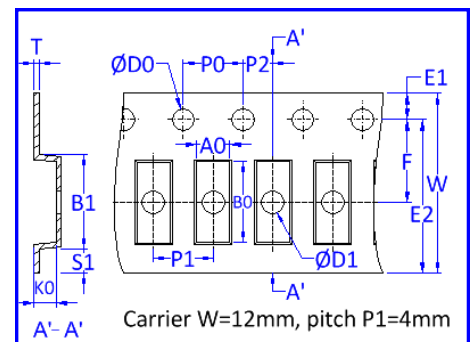


SOLDERING RECOMMENDATIONS



PACKAGING INFORMATION

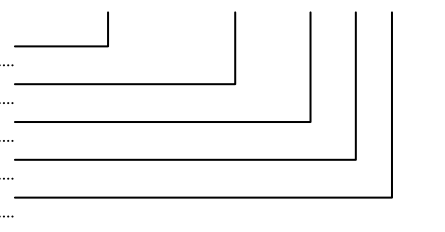
- PACKAGING IN TAPE & REEL IN COMPLIANCE TO EIA-481.
- QTY PER REEL: 3,000PCS
- REEL DIA A=180MM.
- EMBOSSED CARRIER TAPE WIDTH W = 12MM.
- COMPONENT PITCH P1 = 4MM.



PART NUMBER SYNTAX

- PART NUMBER FAMILY (REPRESENTS PRODUCT MODEL AND PACKAGE SIZE / TYPE)
- NOMINAL FREQUENCY (IN KHZ WITH AT LEAST THREE DIGITS AFTER DECIMAL POINT "k")
- LOAD CAPACITANCE (ACTUAL VALUE IN PF, I.E. 06= 6PF, 07= 7PF, 09= 9PF, 12.5= 12.5PF)
- FREQUENCY TOLERANCE DESIGNATOR (ACTUAL VALUE IN PPM OR CODE FOR SPECIAL REQ.)
- OPERATING TEMPERATURE RANGE CODE (I.E. M=-40~85°C, N=-40~105°C, Z=-40~125°C)
- INTERNAL CODE FOR PRODUCTION LINE AND DEVIATING SPEC PARAMETERS

01-CR3-07-32k768-09-20M-CMC



FOR MORE INFORMATION PLEASE CONTACT US.

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