

### QUARTZ CRYSTAL UNIT IN CERAMIC GLASS SEAL SMD PACKAGE, SIZE 6.0 X 3.5MM.

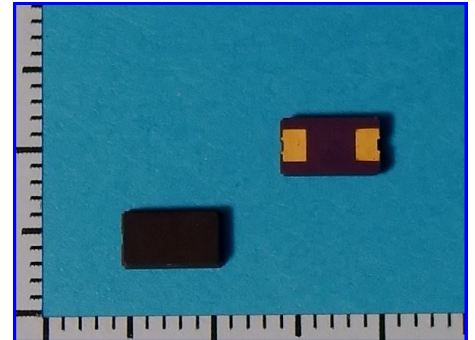
## S6GA

#### PRODUCT FEATURES

- SMALL PACKAGE SIZE 6.0 X 3.5 X 1.2MM WITH 2 PADS.
- LOW COST ALTERNATIVE TO COMMON SEAM SEAL PACKAGES.
- AUTOMOTIVE GRADE COMPLIANT TO AEC-Q200 IS AVAILABLE.
- ROHS COMPLIANT BY EXEMPTION.

#### APPLICATIONS

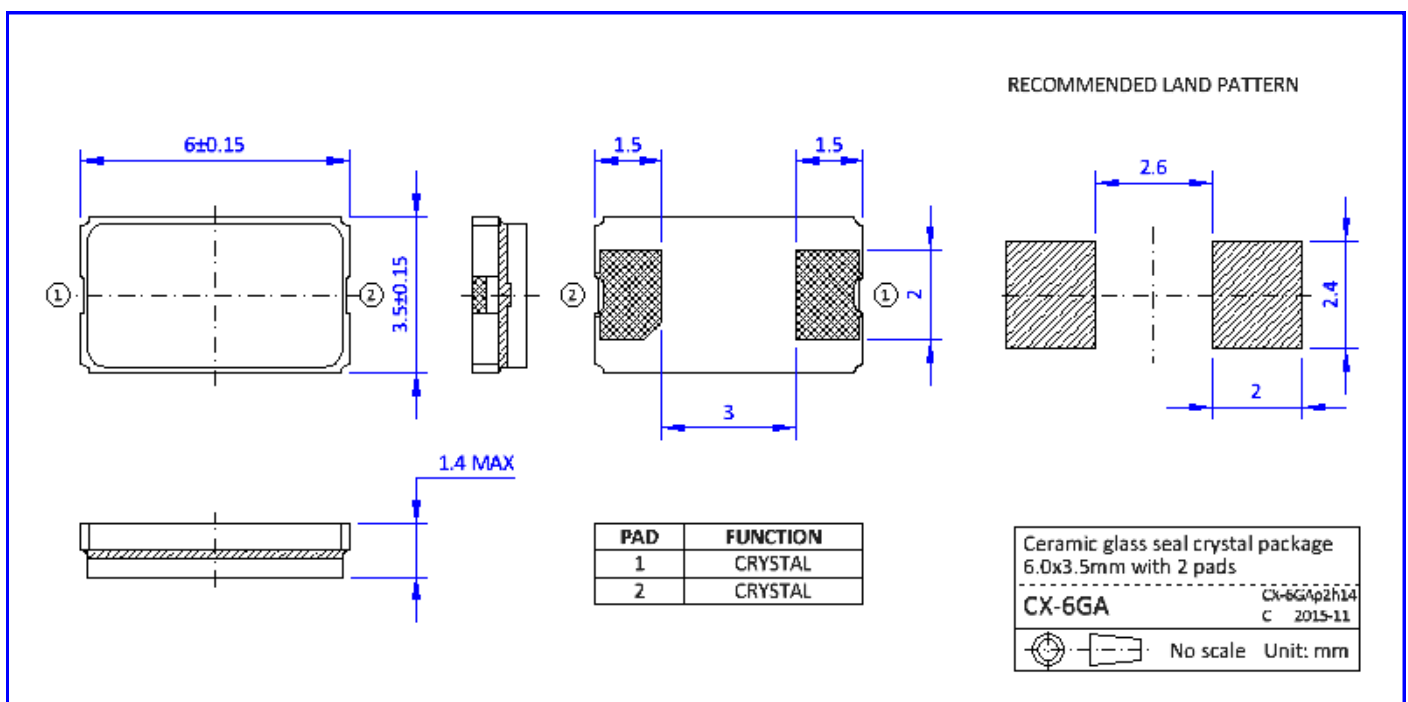
- COMPUTER PERIPHERALS
- OFFICE AUTOMATION
- SET-TOP BOX, TV SETS
- AUDIO & VIDEO



#### PRODUCT SPECIFICATIONS

PARAMETER	SYMBOL	SPECIFICATIONS	REMARKS
FREQUENCY RANGE	$F_N$	<b>8.0 ~ 60.0MHZ</b>	FUNDAMENTAL UP TO 54MHZ
OPERATION MODE	—	FUNDAMENTAL / 3RD OVERTONE	OVERTONE ABOVE 40MHZ
FREQUENCY TOLERANCE	$\Delta f/f$	$\pm 20$ PPM, $\pm 30$ PPM, $\pm 50$ PPM	OTHER OPTIONS AVAILABLE
STABILITY OVER OPERATING TEMP.	$T_C$	$\pm 20$ PPM, $\pm 30$ PPM, $\pm 50$ PPM	DEPENDING ON OPERATING TEMPERATURE RANGE
OPERATING TEMPERATURE RANGE	$T_{OP}$	$-20^{\circ}\text{C} \sim +70^{\circ}\text{C}$ OR $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$	OTHER OPTIONS AVAILABLE
LOAD CAPACITANCE	CL	8 TO 32PF OR SERIES	PLEASE SPECIFY LOAD CAPACITANCE
EQUIVALENT SERIES RESISTANCE	ESR	80 $\Omega$ MAX 60 $\Omega$ MAX 55 $\Omega$ MAX 50 $\Omega$ MAX 100 $\Omega$ MAX	FUND MODE 8 ~ 10MHZ FUND MODE 10 ~ 16MHZ FUND MODE 16 ~ 20MHZ FUND MODE 20 ~ 54MHZ 3RD OT MODE 40 ~ 60MHZ
DRIVE LEVEL	DL	100 $\mu\text{W}$ TYP, 300 $\mu\text{W}$ MAX	—
AGING FIRST YEAR	$\Delta f/y_1$	$\pm 3$ PPM	@+25 $^{\circ}\text{C}$

#### MECHANICAL DIMENSIONS



### QUARTZ CRYSTAL UNIT IN CERAMIC GLASS SEAL SMD PACKAGE, SIZE 6.0 X 3.5MM.

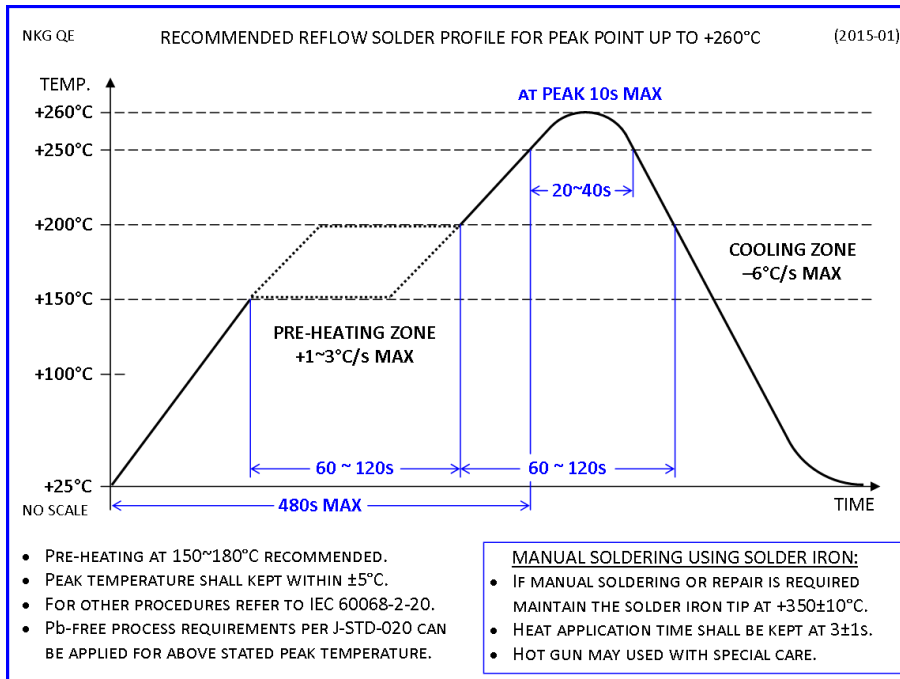
## S6GA

#### ENVIRONMENTAL COMPLIANCE INFORMATION

- ROHS 6/6 COMPLIANT (DIRECTIVE 2011/65/EC) BY EXEMPTION 7(c)-1.
- COMPLIANT TO ROHS 2 (DIRECTIVE 2018/863) (ALSO CALLED ROHS10).
- 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.
- NONE-USE OF CONFLICT MINERALS PER THE DODD-FRANK WALL STREET REFORM AND CONSUMER PROTECTION ACT (WALL STREET REFORM ACT).

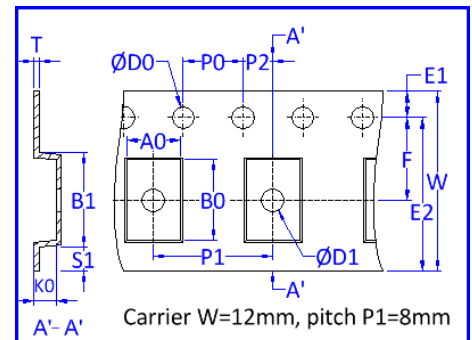


#### SOLDERING RECOMMENDATIONS



#### PACKAGING INFORMATION

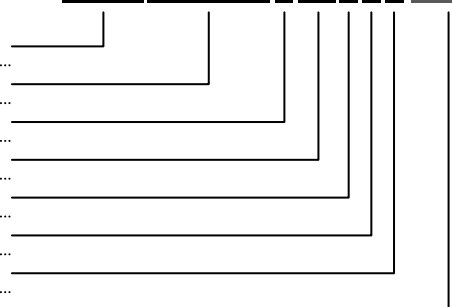
- PACKAGING IN TAPE & REEL IN COMPLIANCE TO EIA-481.
- QTY PER REEL: 1,000PCS
- REEL DIA A=180MM.
- EMBOSSED CARRIER TAPE WIDTH W = 12MM.
- COMPONENT PITCH P1 = 8MM.



#### PART NUMBER SYNTAX

- PART NUMBER FAMILY (REPRESENTS PRODUCT MODEL AND PACKAGE SIZE / TYPE)
- NOMINAL FREQUENCY (IN MHZ WITH AT LEAST FOUR DIGITS AFTER DECIMAL POINT)
- OPERATION MODE CODE (F = FUNDAMENTAL / T = 3RD OVERTONE)
- LOAD CAPACITANCE (ACTUAL VALUE OR SS FOR SERIES)
- OPERATING TEMPERATURE RANGE CODE (I.E. C= -10~60°C, E= -20~70°C, M= -40~85°C)
- FREQUENCY TOLERANCE DESIGNATOR (I.E. 1=10PPM, 2=20PPM, Y=15PPM, Z=25PPM)
- FREQUENCY STABILITY DESIGNATOR (I.E. 1=10PPM, 2=20PPM, Y=15PPM, Z=25PPM)
- PART NUMBER EXTENSION (ONLY FOR NONE-STANDARD OR CUSTOMIZED PART)

S6GA25.0000 F 18 E 23 -EXT



FOR MORE INFORMATION PLEASE CONTACT US.

HONG KONG:

NAKAGAWA ELECTRONICS LIMITED

+852 2389 9201 sales@nkg.com.hk  
+852 2341 0001 www.nkg.com.hk

China Shenzhen office:

深圳中川晶体电子有限公司

+86(0)755 2598 2648 sales\_sz@nkg.cn  
+86(0)755 2598 2390 www.nkg.com.hk

China Suzhou office:

苏州纳美电子有限公司

+86(0)512 8818 7890 sales\_nm@nkg.cn  
+86(0)512 8818 7889 www.nkg.com.hk