



A Product Line of
Diodes Incorporated



SPECIFICATION FOR APPROVAL

CUSTOMER _____

NOMINAL FREQUENCY 25.000000 MHz

PRODUCT TYPE TYPE GC 49S SMD QUARTZ CRYSTAL

SPEC. NO. (P/N) GC2500076

CUSTOMER P/N _____

ISSUE DATE September 26, 2017

VERSION E

APPROVED	PREPARED	QA

Diodes Incorporation

No.2, Ziqiang 5th Rd., Zhongli Industrial Park,
Zhongli Dist., Taoyuan City 32063, Taiwan (R.O.C.)
TEL: 886-3-451-8888
FAX: 886-3-461-3865
<http://www.diodes.com>

*RoHS Compliant
*HF-Halogen Free
*REACH Compliant

TYPE GC 49S SMD QUARTZ CRYSTAL

GC2500076

VER. E 26-Sep-17

VERSION HISTORY

Version No.	Version Date	Customer Receipt Date	Supplier Receipt Date	Description	Notes
A	Dec.4,2008			Initial Release	
B	Mar.10,2009			Revised Format	
C	Aug.5,2010			Changed Maximum Drive Level from 500µW to1000 µW	
D	Apr.22,2011			Updated Suggested IR Reflow Profile & Format	
E	Sep.26,2017			Updated logo	



TYPE GC 49S SMD QUARTZ CRYSTAL

GC2500076

VER. E 26-Sep-17

ELECTRICAL SPECIFICATIONS

Item	Symbol	Specifications	Units	Notes
Nominal Frequency	Fn	25.000000	MHz	
Mode of Oscillation	MO	AT Cut-Fundamental		
Calibration Load Capacitance	CL	18	pF	
Calibration Tolerance	FL	±30	ppm	at 25°C±3°C
Operating Temperature Range	TR	-20 to +70	°C	
Frequency Stability (Frequency Deviation over the Operating Temperature Range)	F/T	±30	ppm	Reference to the Frequency at 25°C
Operating Drive Level		100	µW	
Maximum Drive Level		1000	µW	
Equivalent Series Resistance	ESR	30	Ω	Max
Shunt Capacitance	C0	7	pF	Max
Aging at 25°C		±5	ppm	Max, 1st year
Storage Temperature		-55 to +125	°C	
Insulation Resistance		500	MΩ	Min

TYPE GC 49S SMD QUARTZ CRYSTAL

GC2500076

VER. E 26-Sep-17

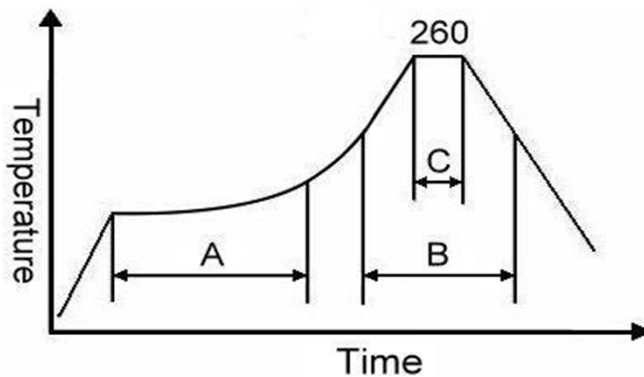
RELIABILITY SPECIFICATIONS

MECHANICAL AND ENVIRONMENTAL RATINGS:

- a) FINE LEAK TEST: JESD22-A109 (Condition 1A)
- b) GROSS LEAK TEST: JESD22-A109 (Condition C)
- c) MOISTURE RESISTANCE: JESD22-A113
- d) SHOCK: JESD22-B104 (Condition B)
- e) SOLDERABILITY : (RoHS version): J-STD-002
- f) VIBRATION: JESD22-B103
- g) SOLVENT RESISTANCE: JESD22-B107
- h) RESISTANCE TO SOLDERING HEAT (RoHS version): J-STD-020D Table 5.2 Pb free devices (3 cycles max)

SUGGESTED IR REFLOW PROFILE

*As per IPC-JEDEC J-STD-020D



Note:

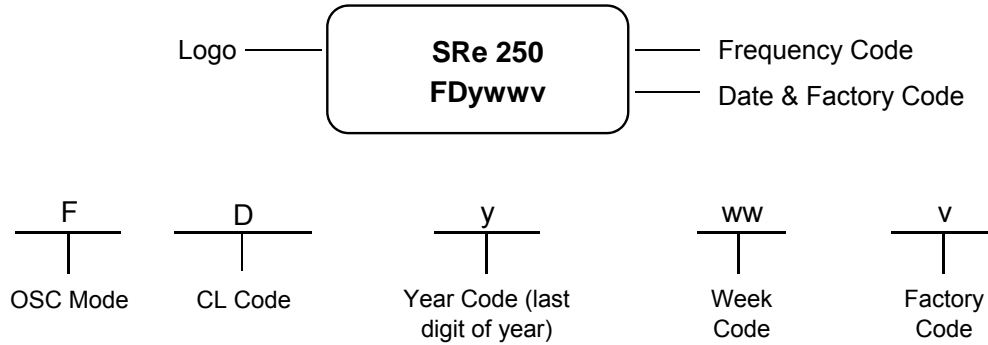
	Stage	Temperature	Time
A	Preheat	150~200°C	60~120 Sec
B	Primary Heat	217°C	60~150 Sec
C	Peak	260°C	10 Sec

TYPE GC 49S SMD QUARTZ CRYSTAL

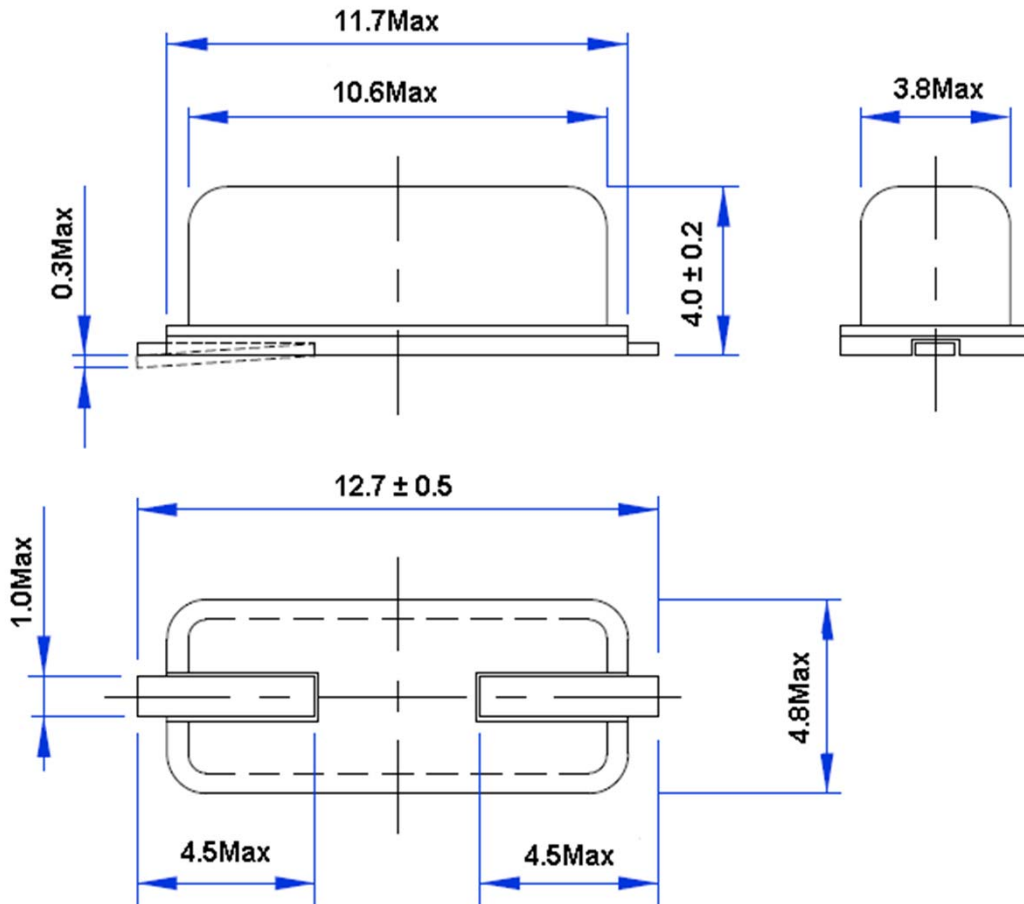
GC2500076

VER. E 26-Sep-17

MARKING



MECHANICAL DRAWINGS (Scale: None. Dimensions are in mm.)

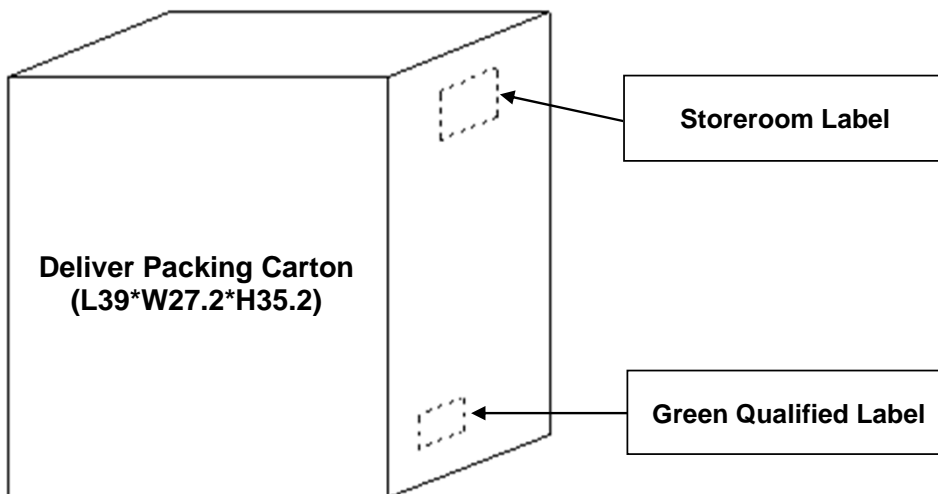
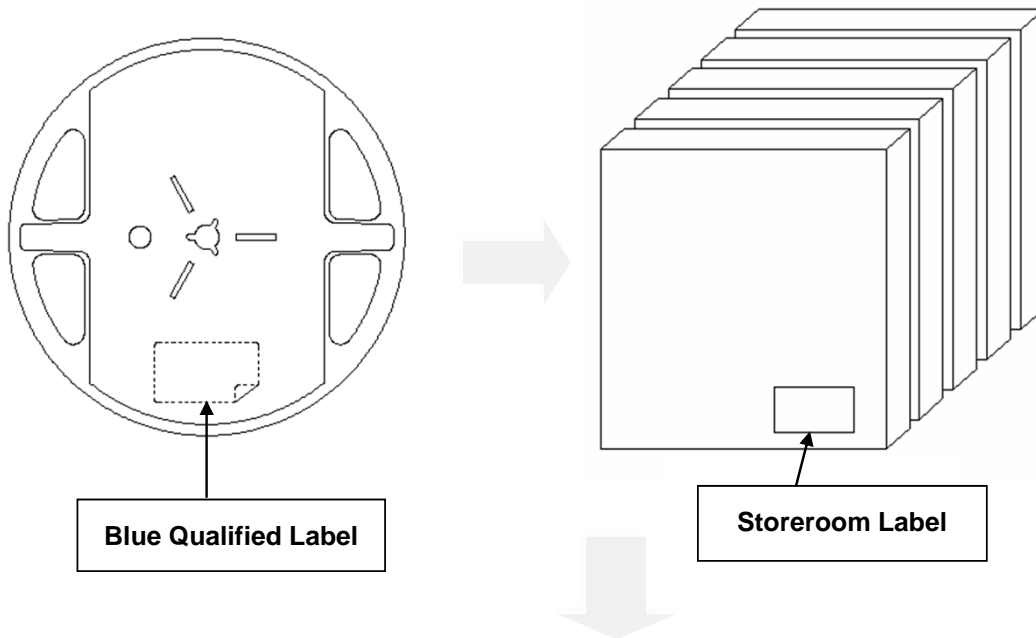
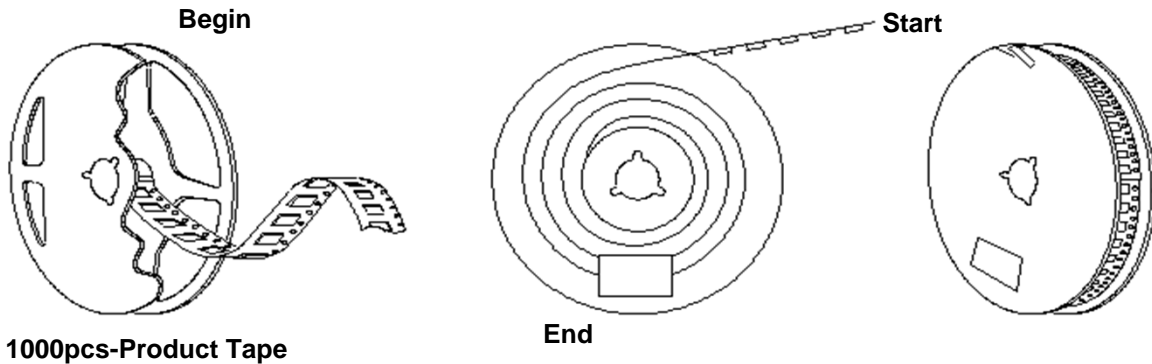


TYPE GC 49S SMD QUARTZ CRYSTAL

GC2500076

VER. E 26-Sep-17

PACKING



单击下面可查看定价，库存，交付和生命周期等信息

[>>Diodes Incorporated\(达达科技\(美台\)\)](#)