



EAS CORPORATION

SPECIFICATION FOR APPROVAL

CUSTOMER : _____

PRODUCT TYPE : JU-308 32.768K TUNING FORK TYPE

NOMINAL FREQ. : 32.768KHz

EAS P/N : EAS30832.768KC5DJR1

REVISION : S1

CUSTOMER P/N : _____

PM / SALES : _____

DATE : _____

CUSTOMER SIGNATURE & Date _____

- (1) EAS requires one copy returned with signature and title of authorized individual that signifies acceptance of the attached specifications.
- (2) Orders received and accepted by EAS after return of signed copy of specification will be produced per these specifications.
- (3) Any changes to these specifications must be agreed upon by both parties and new revision of the Product Specification Sheet will be issued.
- (4) Any issuance of purchase order prior to consigning back the Approval page of "Specification Sheets" from customers will be regarded as the agreement on the contents of these specifications.

Attachment: Product Specification Sheet

- 1
- 2
- 3
- 4
- 5

RoHS Compliant

PRODUCT SPECIFICATION SHEET

PRODUCT TYPE : JU-308 32.768K TUNING FORK TYPE

NOMINAL FREQ. : 32.768KHz

EAS P/N : EAS30832.768KC5DJR1

REVISION : S1

RD	QA	MFG

NOTE:

- (1)Lead Free Products are "Directive 2002/95/EC of The European Parliament of 27 January 2003 on the restriction of the use of certain hazardous substances (RoHS) in electrical and electronic equipment" Compliant (Attachment: SGS Test Report).
- (2)Revision "Sx" is for engineering samples only. PE/RD's approval required.
- (3)Revision "Ax" is production ready. PE, QA and MFG's approval required

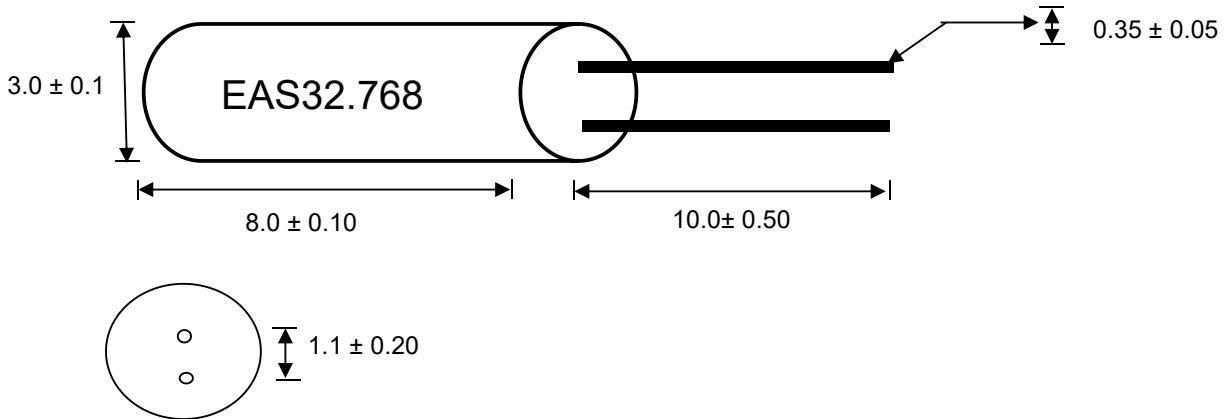
RoHS Compliant

■ ELECTRICAL SPECIFICATIONS

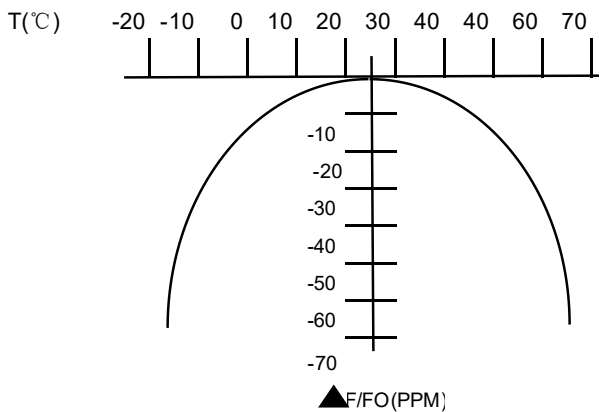
	Parameters	SYM.	Electrical Spec.				Notes
			MIN	TYPE	MAX	UNITS	
1	Nominal Frequency	F0	32.768			KHz	-
2	Frequency Tolerance	-	± 20			ppm	at 25 °C
3	Driver Level	DL	-	0.1	0.5	uW	-
4	Load Capacitance	CL	12.5			pF	-
5	Series Resistance	-	-	-	35	KΩ	-
6	Peak Temperature (Frequency)	-	20	25	30	°C	at 25 °C ±5°C
7	Frequency-Temperature coefficient	-	-	-	-4.0*10 ⁻⁸	°C ²	-
8	Storage Temperature	-	-40	~	85	°C	-
9	Operating Temperature	-	-20	~	75	°C	-
10	Shunt Capacitance	C0	-	1.05	-	pF	-
11	Motional Capacitance	C1	-	3.7	-	fF	-
12	Insulation Resistance	-	500	-	-	MΩ	at DC 100V±15V
13	Aging	-	±3			ppm	1st Year

■ DIMENSIONS

(UNIT:mm)



■ TEMPERATURE V.S FREQUENCY CURVE

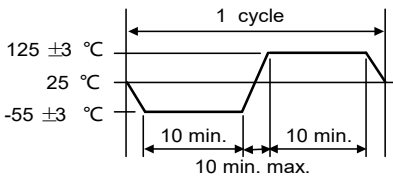


■ RELIABILITY SPECIFICATIONS

1.Mechanical Endurance

No.	Test Item	Test Methods	REF. DOC
1.1	Drop Test	150 cm height, fall freely onto concrete floor 3 times.	JIS C6701
1.2	Mechanical Shock	Device are shocked to half sine wave (1000 G) three mutually perpendicular axes each 3 times. 0.5m sec. duration time	MIL-STD-202F
1.3	Vibration	Frequency range 10 ~ 2000 Hz Amplitude 1.52 mm,20G Sweep time 20 minute Perpendicular axes each test time 4 hours (Total test time 12 hours)	MIL-STD-883E
1.4	Solderability	Temperature 260 °C ± 5°C Immersing depth 0.5 mm minimum Immersion time 5 ± 1 seconds Flux Rosin resin methyl alcohol solvent (1 : 4)	MIL-STD-883E

2.Environmental Endurance

No.	Test Item	Test Methods	REF. DOC
2.1	Resistance To Soldering Heat	Pre-heat temperature 125 °C Pre-heat time 60 ~ 120 sec. Test temperature 260 ± 5 °C Test time 10 ± 1 sec.	MIL-STD-202F
2.2	High Temp. Storage	+ 125 °C ± 3 °C for 1000 ± 12 hours	MIL-STD-883E
2.3	Low Temp. Storage	- 40 °C ± 3 °C for 1000 ± 12 hours	
2.4	Thermal Shock	Total 100 cycles of the following temperature cycle  <p>1 cycle</p> <p>125 ±3 °C</p> <p>25 °C</p> <p>-55 ±3 °C</p> <p>10 min.</p> <p>10 min.</p> <p>10 min. max.</p>	MIL-STD-883E
2.5	Pressure Cooker Storage	121 ± 3°C, RH100%, 2 bar, for 240 hours	JIS C6701
2.6	High Temp & Humidity	85°C ± 3°C, RH 85% , 1000Hrs	JIS C5023