

REAL TIME CLOCK MODULE PTRTC1010

FEATURES

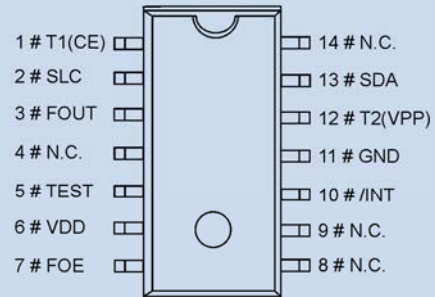
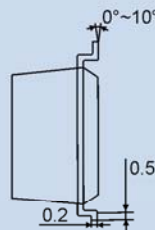
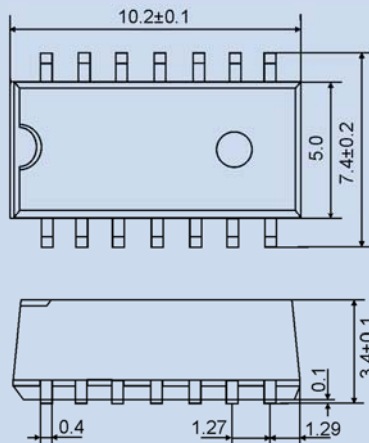
- Built in frequency adjusted 32.768 kHz crystal unit and DTCXO
- Interface type: I²C-bus interface (400 kHz)
- The various functions include full calendar, alarm, timer
- 32.768kHz output with OE function (F_{OE} and F_{OUT} pins)
- Auto correction of leap years (from 2000 to 2099)
- Low current consumption: < 1.8μA/3V (Type)

Pb free
 RoHS 2002/95/EG
 compliant

GENERAL DATA

TYPE / ORDERING INFORMATION	PTRTC1010
FREQUENCY STABILITY vs. TEMPERATURE (FST)	± 3.0ppm (-10°~+60°C) ± 5.0ppm (-40°~+85°C)
INITIAL FREQUENCY TOLERANCE	± 5.0ppm max.
SUPPLY VOLTAGE	1.6V min, 3.0V typ., 5.5V max.
TEMPERATURE COMPENSATED VOLTAGE RANGE	2.0V min, 3.0V typ., 5.5V max.
WIDE TIMEKEEPER VOLTAGE RANGE	1.4V min, 3.0V typ., 5.5V max.
32.768 kHz FREQUENCY OUTPUT FUNCTION	CMOS output with control pin CL=30pF Output selectable: (32.768 kHz, 1024 Hz, 1 Hz)
STANDARD OPERATING TEMPERATURE RANGE	-40°~+85°C
STORAGE TEMPERATURE RANGE	-55°~+150°C
DELIVERY FORM	Tape & Reel (1.000 pcs per reel)

DIMENSIONS



Unit: mm

CRYSTALS

OSCILLATORS

CERAMIC RESONATORS



Premium Quality by
PETERMANN-TECHNIK

CERAMIC FILTERS

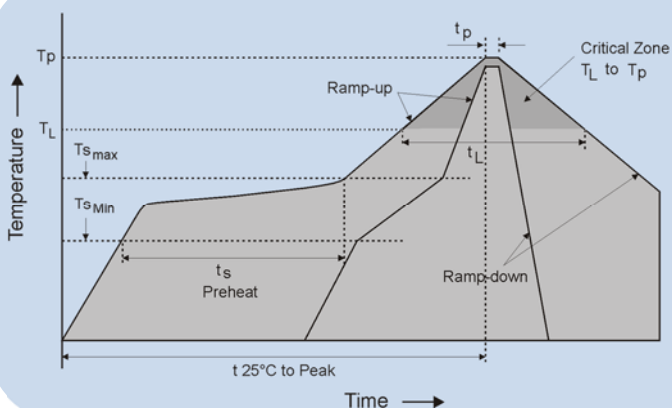
SAW COMPONENTS

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PIN FUNCTIONS

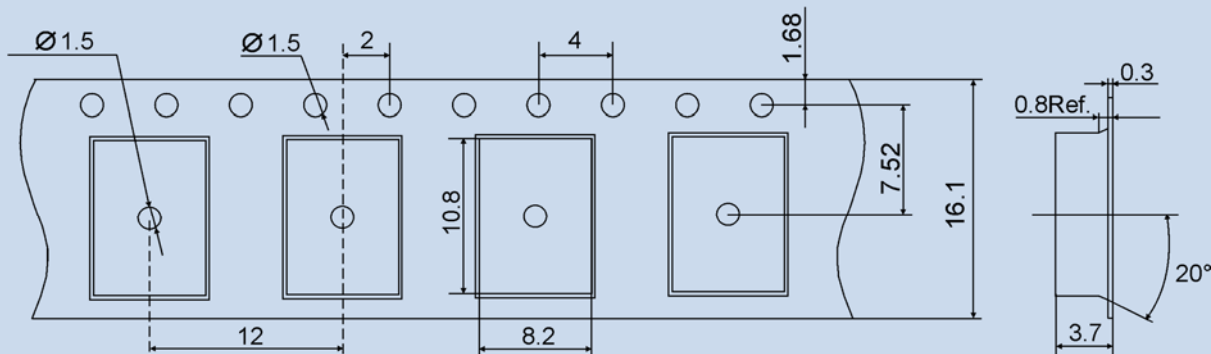
SIGNAL NAME	PIN NO.	I/O	FUNCTION
T1(CE)	1	input	*Use by the manufacture for testing. (Do not connect externally.)
SLC	2	input	Serial clock input pin
FOUT	3	output	The pin outputs the reference clock signal. (CMOS output)
TEST	5	input	*Use by the manufacture for testing. (Do not connect externally.)
VDD	6	-	Connected to a positive power supply
FOE	7	input	The input pin for the FOUT output control.
/INT	10	output	Interrupt output (N-ch open drain)
GND	11	-	Connected to a ground
T2(VPP)	12	-	*Use by the manufacture for testing. (Do not connect externally)
SDA	13	I/O	Data input and output pin

REFLOW SOLDER PROFILE



Profile Feature	Pb-Free Assembly
Average ramp-up rate (TL to TP)	3°C/second max.
Preheat:	
Temperature Min (T _{smin})	150°C
Temperature Max (T _{smax})	200°C
Time (min to max) (t _s)	60-180 seconds
Time maintained above:	
Temperature (TL)	217°C
Time (t _L)	60-150 seconds
Peak/Classification Temperature (T _p)	240°C
Time within 5°C of actual Peak Temperature (t _p)	20-40 seconds
Ramp-down Rate	6°C/second max.
Time 25°C to Peak Temperature	8 minutes max.

REEL SPECIFICATION



Dimensional accuracy: $\pm 0.1\text{mm}$

CRYSTALS
OSCILLATORS
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