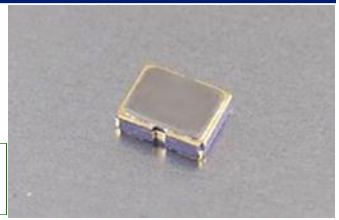


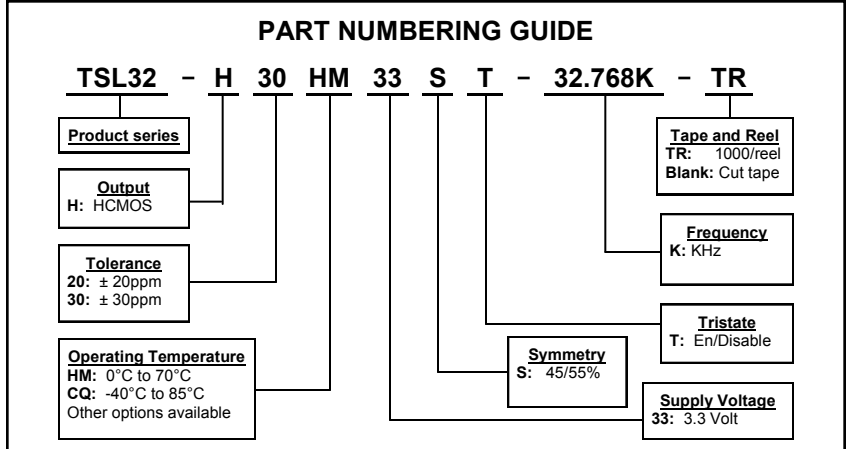
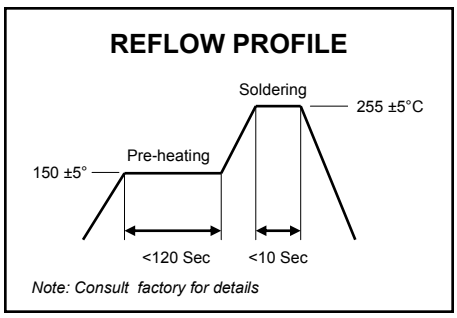
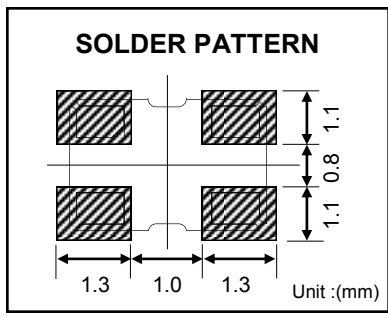
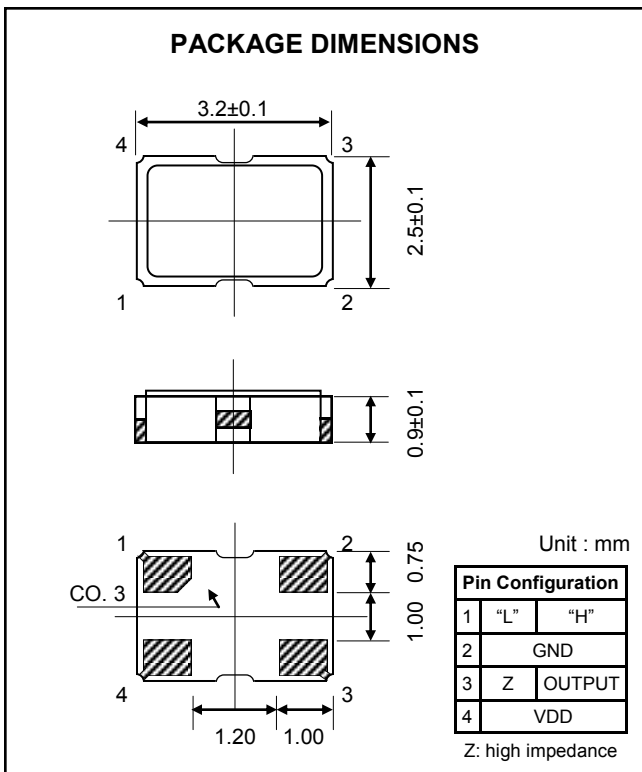
MINIATURE SMD REAL TIME OSCILLATOR (3.2 x 2.5 x 1.0mm)
FEATURES:

- HCMOS OUTPUT @ 32.768KHz
- LOW VOLTAGE
- LOW CURRENT

RoHS
Compliant



MODEL		TSL32
FREQUENCY		32.768 kHz
FREQUENCY TOLERANCE		+30 ppm to -10 ppm over (VDD = +3.3V at +25°C)
FREQUENCY STABILITY		+30 ppm to -90 ppm over (-20°C to +70°C ref. to +25°C) +30 ppm to -130 ppm over (-40°C to +85°C ref. to +25°C)
OPERATING CONDITIONS	OPERATING TEMPERATURE	-40°C to 85°C
	STORAGE TEMPERATURE	-55°C to 125°C
	INPUT VOLTAGE(VDD)	+1.5V to +5.5V
	ABSOLUTE SUPPLY VOLTAGE	+1.5V to +5.5V
INPUT CURRENT		1.5 µA max. (VDD= +3.3V without load over -40°C to +85°C)
STAND-BY CURRENT (Pin#1-VIL)		250 nA max. (without load at +25°C)
OUTPUT (-40°C to +85°C)	SYMMETRY	40% to 60% at 1/2V level (CL = 15pF over -40°C to +85°C)
	RISE AND FALL TIMES	200 ns max. (CL= 15pF) (10%VDD to 90% VDD level)
	"0" LEVEL	VOL : 0.4V max. (CL = 15 pF at +25°C)
	"1" LEVEL	VOH : VDD-0.4V min. (CL = 15 pF at +25°C)
	LOAD	15 pF max. (CMOS)
	DISABLE DELAY TIME	100 ns max.
	ENABLE DELAY TIME	1 sec. max.
TRI-STATE CONTROL		#1: 90%VDD min. (ViH) #3: Output / #1: 10%VDD max. (ViL) #3: High impedance
START-UP TIME		1 sec. max. (VDD = +1.5V to +5.5V over -40°C to +85°C within ±10ppm)
AGING		±5 ppm max. at +25°C ±3% for first year



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