

Nominal frequency (f0)
20 MHz
Frequency stabilities

Parameter	Frequency stability	Operating temp. range
Over all (df/f0)	-4.6 to 4.6 ppm	
vs. operating temp. range (df/f@25 °C)	-0.28 to 0.28 ppm	-40 ... 85 °C
Parameter	Value	Condition
initial tolerance (df/f0)	-1 to 1 ppm	@25 °C
vs. supply voltage change (df/f)	-0.2 to 0.2 ppm	static; 3.3 V $\pm$ 5 %
vs. load change (df/f)	-0.2 to 0.2 ppm	static; Load $\pm$ 10 %
vs. aging / 20 years (df/f)	$\leq \pm$ 2.5 ppm	@ 40 °C
Holdover 24 h	$\pm$ 0.32 ppm	incl. temp. stab. -40...+85°C
overall incl.: initial, temp.-40...+85°C, supply, load var. and aging 20 years		

RF output

Parameter	Value	Condition
Signal	LVC MOS	
Load	15 pF $\pm$ 10 %	
Fan out	3	
Rise Time	< 5 ns	@ 10 to 90 %Vout
Fall Time	< 5 ns	@ 90 to 10 %Vout
Duty cycle	45 / 55 %	@ 1.65 V
V Low	x < 0.3 V	
V High	x > 3 V	
Enable function	Enable Function	output
	Pin 8	Pin 5
	high	data
	open	data
	low	high tristate

Supply voltage

Parameter	Value	Condition
Supply voltage (Vs)	3.3 V $\pm$ 5 %	
Current consumption steady state	< 6 mA	@ Vsnom & 25 °C

Additional Parameters

Additional Parameters			
Parameter	Typ.	Max.	Condition
Phase Noise	-90		dBc/Hz@10Hz
	-115		dBc/Hz@100Hz
	-137		dBc/Hz@1000Hz
	-148		dBc/Hz@10kHz
	-155		dBc/Hz@100kHz
	-155		dBc/Hz@1000kHz
Parameter	Value		Condition
Additional information			
This SMD oscillator is designed only for pick and place/reflow soldering process. Manual soldering may damage the part and therefore not recommended for the mounting of this oscillator.			
Processing & Packing	handling&processing note		

Additional environmental conditions

Rapid temperature changes
MIL-883-1010 Cond B 500 cycles -55/125°C
Vibration
MIL-STD-883 Meth 2007 Cond A 20G 20-2000Hz 4x in each 3axis 4 min
Shock
MIL-STD-202 Meth 213 Cond.C 200G 6ms 6 shocks in each direction
Solderability
J_STD_002B Cond A leaded/ Cond. B SMD 245°C (diving Time 5 $\pm$ 0,5sec.)
Dip+Look with 8h damp pre-treatment: solder wetting >95%
Solvent resistance
MIL-STD-883 Meth 2015 Solv. 1,3,4

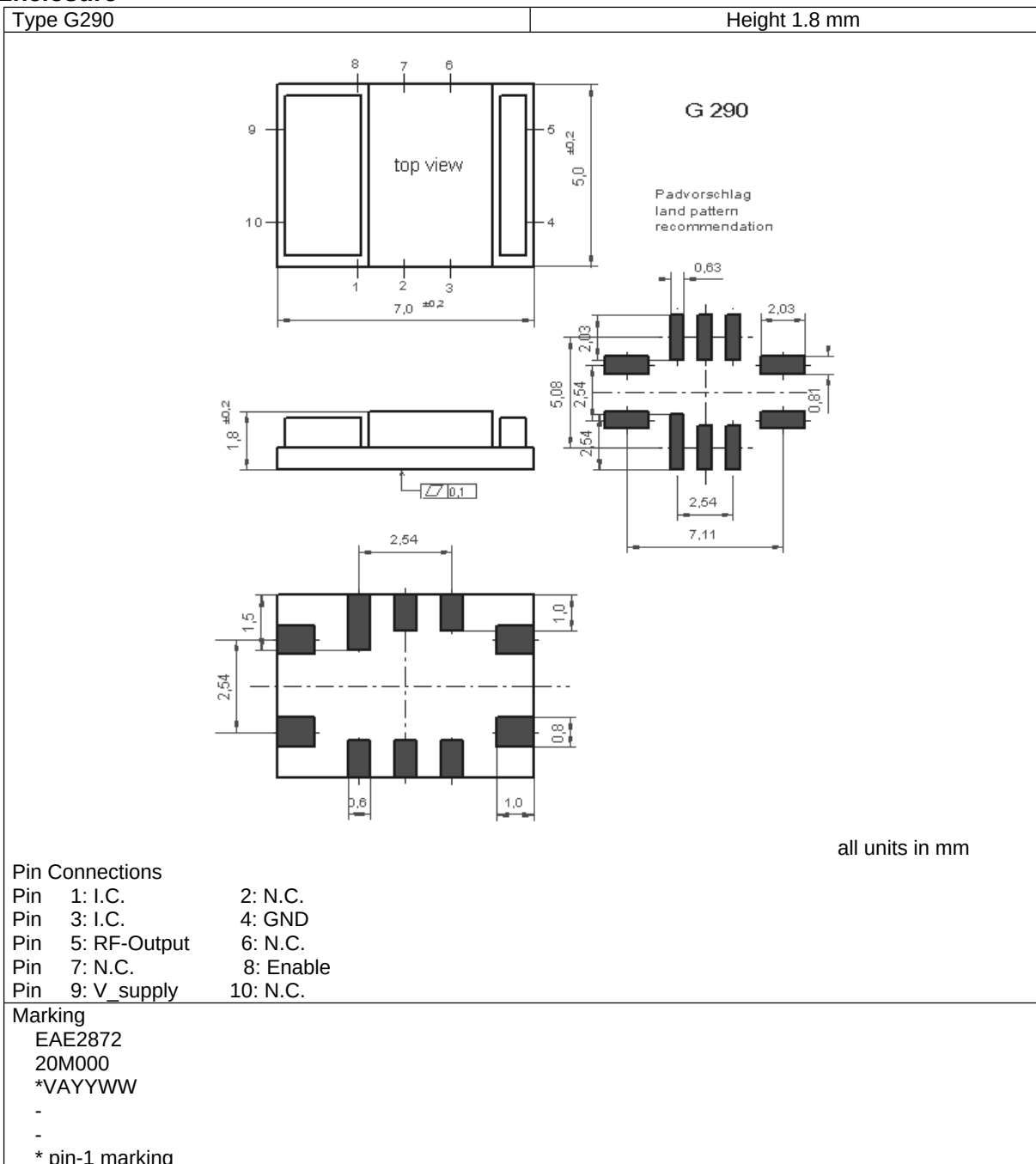
Additional environmental conditions

ESD
HBM JESD22-A114-A Class 1 10* 1000V
Moisture Sensit.
Level 1 JESD22-A113-B
RoHS compliance
100% RoHS 6 compliant
Washable
non-washable device

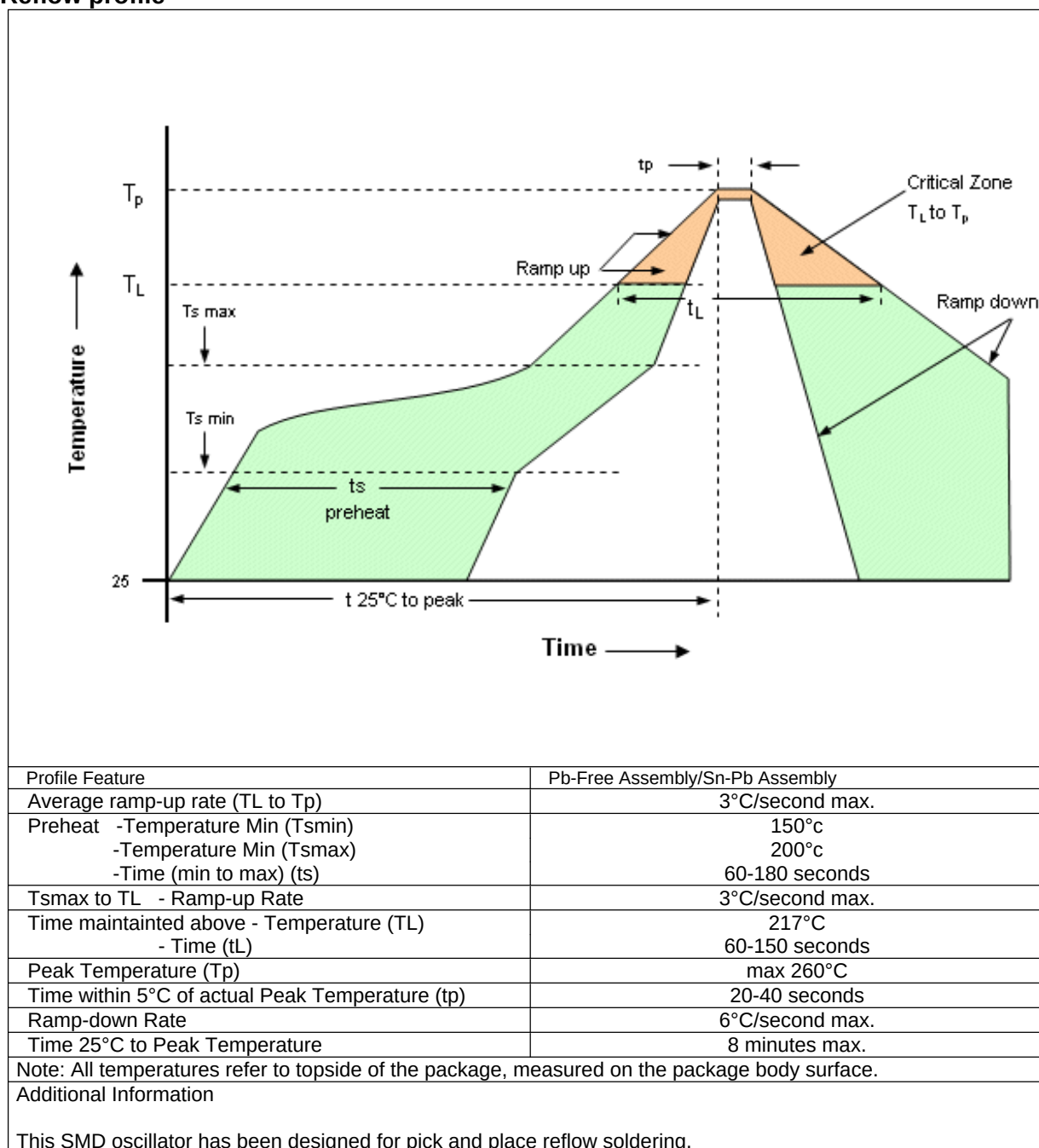
Absolute Maximum Ratings

Parameter	Min	Typ	Max	Units	Condition
Supply voltage (Vs)			6	V	
Operable temperature range	-40		85	°C	
Storage temperature range	-55		125	°C	

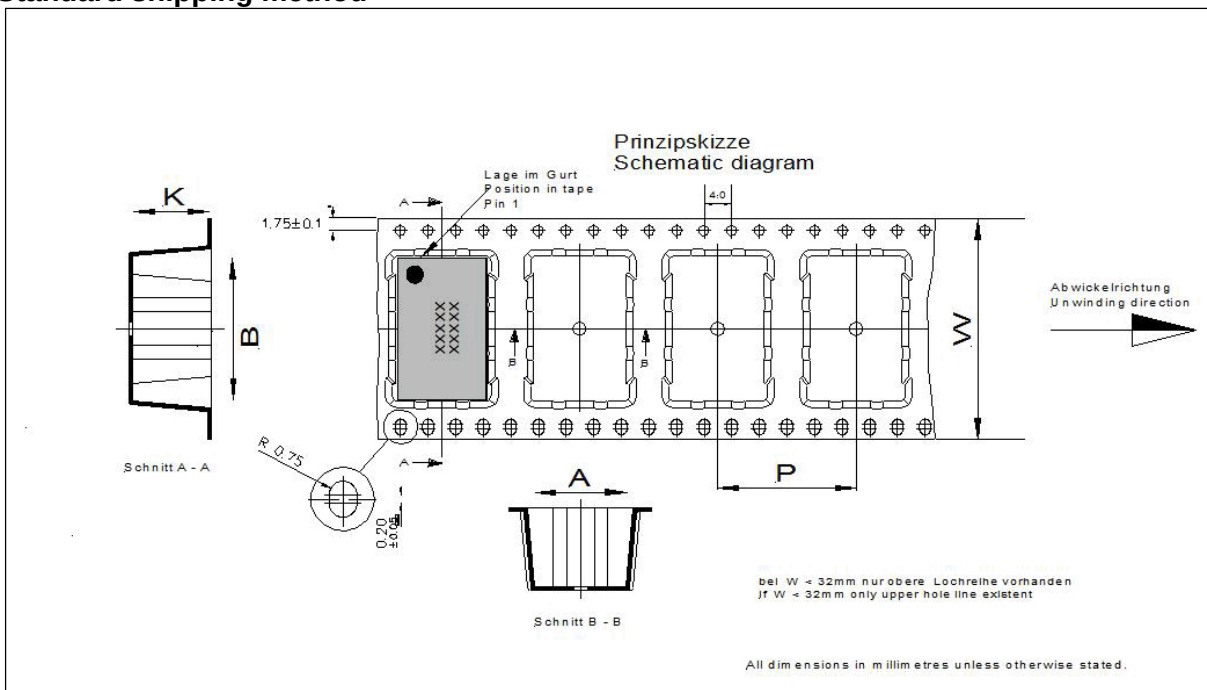
Enclosure



Reflow profile



Standard shipping method



Tape width W [mm]	Quantity per meter	Quantity per reel	P [mm]	A [mm]	B [mm]	K [mm]
16	125	750	8	5.4	7.4	2.7

Notes:

Unless otherwise stated all values are valid after warm-up time and refer to typical conditions for supply voltage, frequency control voltage, load, temperature (25°C).
Subject to technical modification.

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