

● ELECTRICAL SPECIFICATIONS

Parameters	Value	Unit
Frequency Range	20.000 ~ 60.000	MHz
Frequency Tolerance at 25°C, max	±0.5	%
Frequency Stability over Temperature Range, max	±0.3	%
Operating Temperature Range	Standard	-20 ~ +85
	Extended 1	-40 ~ +125
Storage Temperature Range	-55 ~ +125	°C
Load	5	pF
Aging For 10 Years	±0.3	%

Note\*: Other Loads available. Please consult with the factory

● MECHANICAL SPECIFICATION (A)

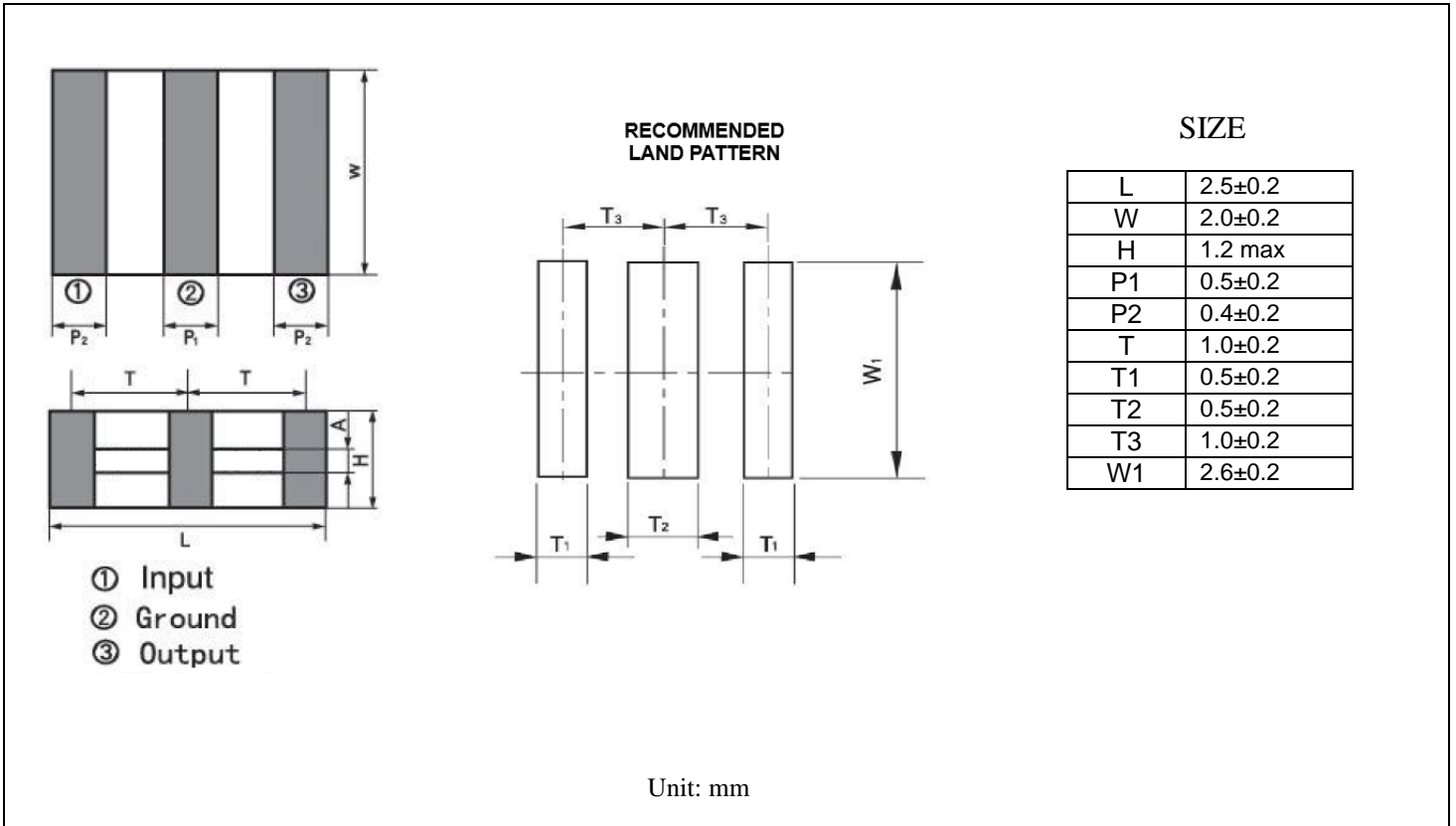
① Input  
② Output

SIZE

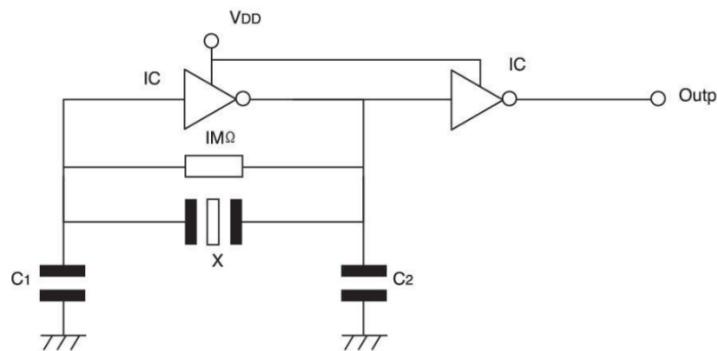
L	2.5±0.2
W	2.0±0.2
H	1.2max
P2	0.4±0.2
T	2.0±0.2
T1	0.5±0.2
T3	2.0±0.2
W1	2.6±0.2

Unit: mm

● MECHANICAL SPECIFICATION (B)

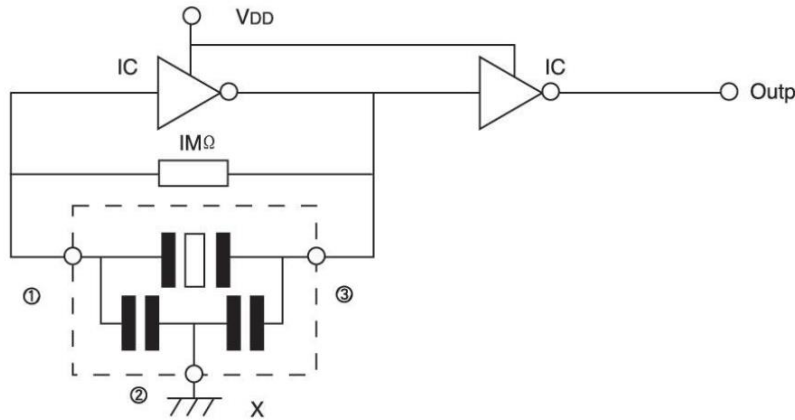


● TEST CIRCUIT (A)



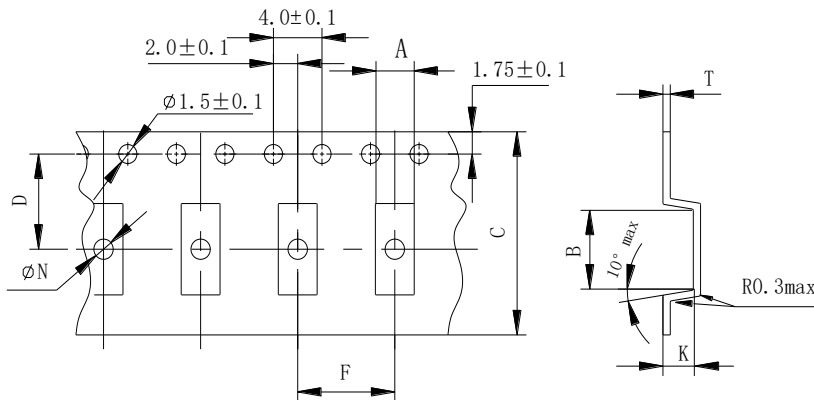
X: Ceramic Resonator  
VDD: +5V

● TEST CIRCUIT (B)



X: Ceramic Resonator  
VDD: +5V

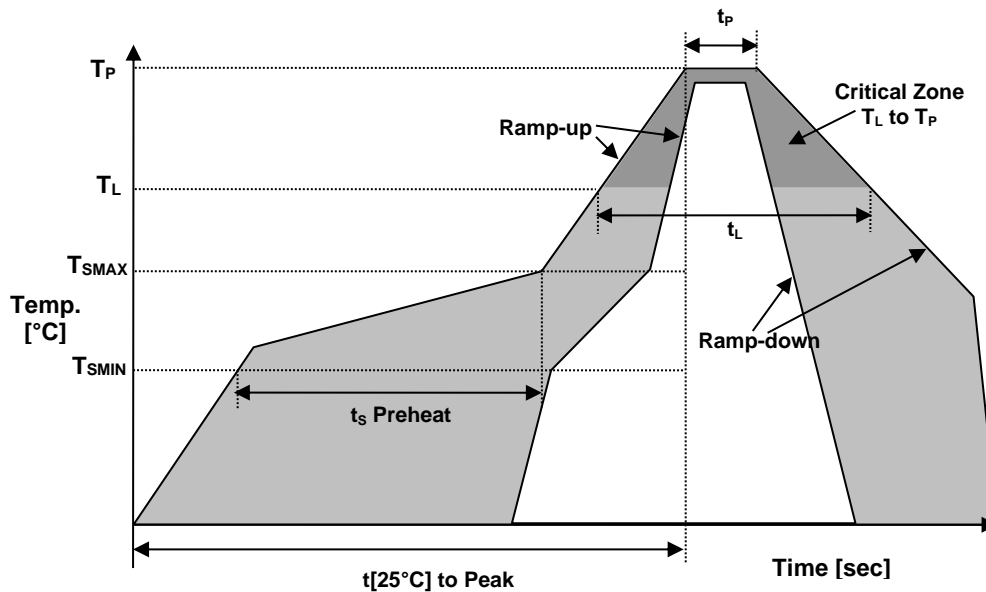
● CARRIER TAPE DIMENSIONS



6.0\*3.0mm

CP	A	B	C	D	F	ΦN	K	T
mm	3.4±0.2	6.5±0.2	16.0±0.2	7.5±0.1	8.0±0.1	1.55±0.1	2.1±0.1	0.3±0.1

## REFLOW PROFILE



Reflow profile		
Temperature Min Preheat	$T_{SMIN}$	140°C
Temperature Max Preheat	$T_{SMAX}$	160°C
Time ( $T_{SMIN}$ to $T_{SMAX}$ )	$t_s$	80-120 sec.
Temperature	$T_L$	200°C
Peak Temperature	$T_P$	260°C max
Ramp-up rate	$R_{UP}$	3°C/sec max.
Ramp-down rate	$R_{DOWN}$	6°C/sec max.
Time within 5°C of Peak Temperature	$t_p$	10 sec.
Time $t_{[25^\circ\text{C}]}$ to Peak Temperature	$t_{[25^\circ\text{C}]}$ to Peak	180 sec.
Time	$t_L$	20-40 sec.

## ENVIRONMENTAL

Parameter	Value
MOISTURE SENSITIVITY LEVEL	1
RoHS	Compliant
REACH SVHC	Compliant
HALOGEN-FREE	Compliant
ESD CLASSIFICATION LEVEL	N/A
TERMINATION FINISH	Sn





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## CERAMIC RESONATOR GENERAL SPECIFICATIONS

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### SMR 2520 A and B Series

#### ● PART NUMBERING SYSTEM

Series	-	Frequency (MHz)	-	Pads	-	Package type (mm)	-	Operating Temperature (°C)	-	Load (pF)
SMR	-	20.000 ~ 60.000	-	A=2pads B=3pads	-	2520=2.5x2.0	-	Blank for Standard EXT1=Extended 1	-	5

#### Example: SMR-27.000-A2520-5

SMR, 27.000 MHz, A Two Pads, 2.5 x 2.0mm, from -20°C to +85°C, 5 pF load

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