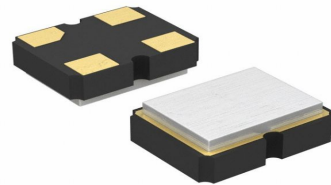


## SMD32254P

### ■ Features

A small surface-mount type crystal unit, ideal for OA, AV and Accessories for a car, which need performance for wide temperature range.

- Compact and thin. (3.2×2.5×0.7mm typ.)
- Excellent electrical performance, ideal for OA and AV applications.
- Excellent environmental performance, including heat and shock resistance.
- Meets the requirements for re-flow profiling using lead-free solder.



### ■ Specifications

项目Item	技术Specifications	备注Remarks
频率范围Freq. Range	28.224MHZ	
调整频差Freq. Tol.	±20PPm(Standard) at 25°C±3°C	Others are offered
负载电容Load Capacitance	20pf	可依实际而定Others are offered
Series Resistance	As ESR table	
Storage Temperature	±20PPm(Standard)	可依实际而定Others are offered
工作温度Operaing Temp	-20°C to 70°C(Standard)	可依实际而定Others are offered
储存温度Storage Temp	-55°C to 125°C	
最大值Max, drive level	1000 μW	
建议使用Rec, drive level	100 μW	
静电容 Shunt Capacitance	5pF Max	
绝缘电阻 Insulation Resistance	500mΩ Min	Minimum
老化率Aging	±2PPm/Year Max	Maximum

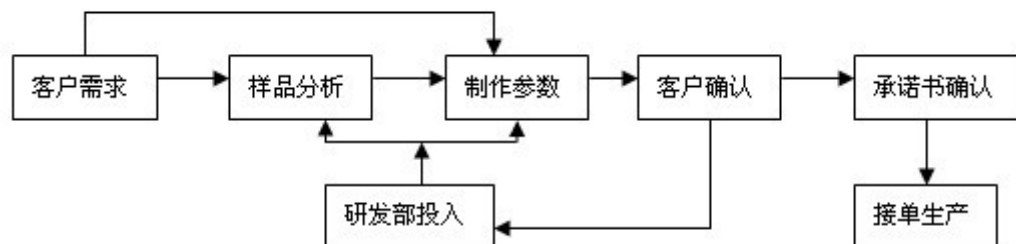
### ■ ESR (Series Resistance)

Frequency (MHz)	Mode	Ohm Max	Frequency (MHz)	Mode	Ohm Max
9.800~11.999	Fund. AT	200	30.000~66.000	Fund. AT	40
12.000~19.999	Fund. AT	80	40.000~100.000	3rd O. T. ;AT	120
20.0001~29.999	Fund. AT	60	100.001~150.000	3rd O. T. ;AT	90

### ■ Stability vs. Temperature

★Standard		1	2	3	5	6	7	Remarks
☆Please specify		±10ppm	±20ppm	±30ppm	±50ppm	±100ppm	±150ppm	
B	-10°C to +60°C	☆				☆		
C	-20°C to +70°C	☆	★	☆	☆	☆	☆	Standard
D	-40°C to +85°C		☆	★	☆	☆	☆	
E	-40°C to +125°C			☆	★	☆	☆	

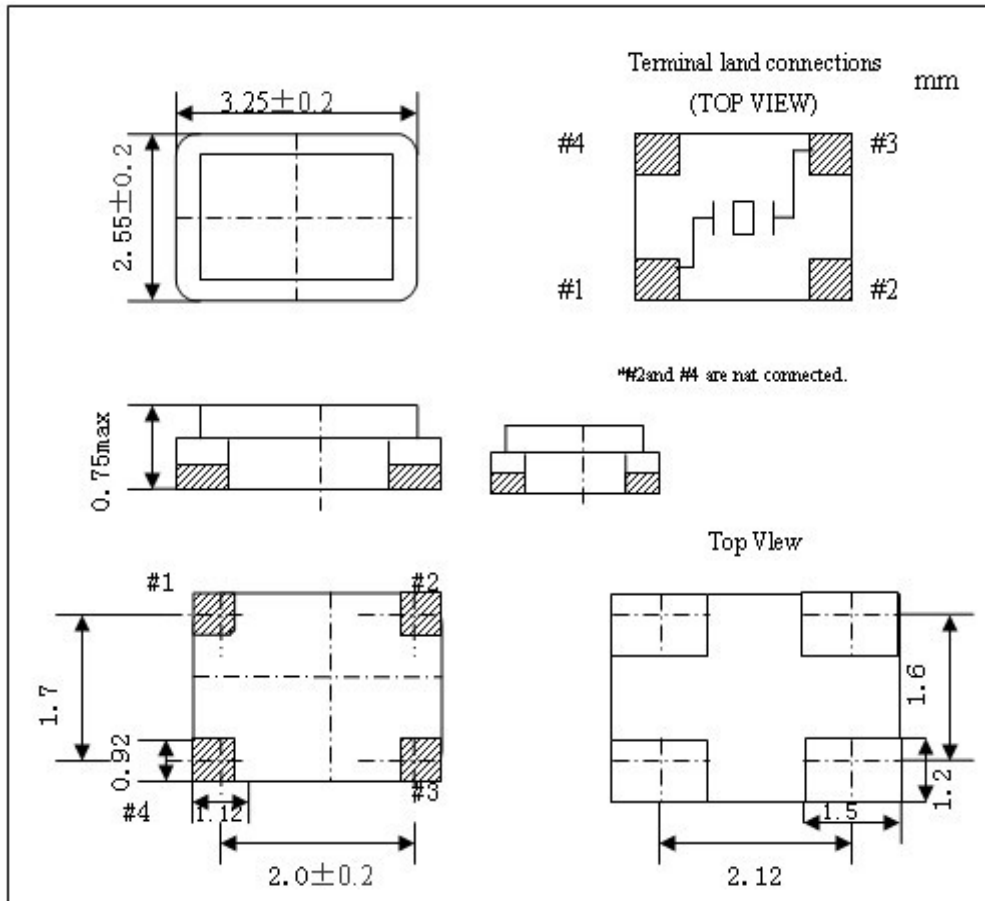
### ■ Ordering Information



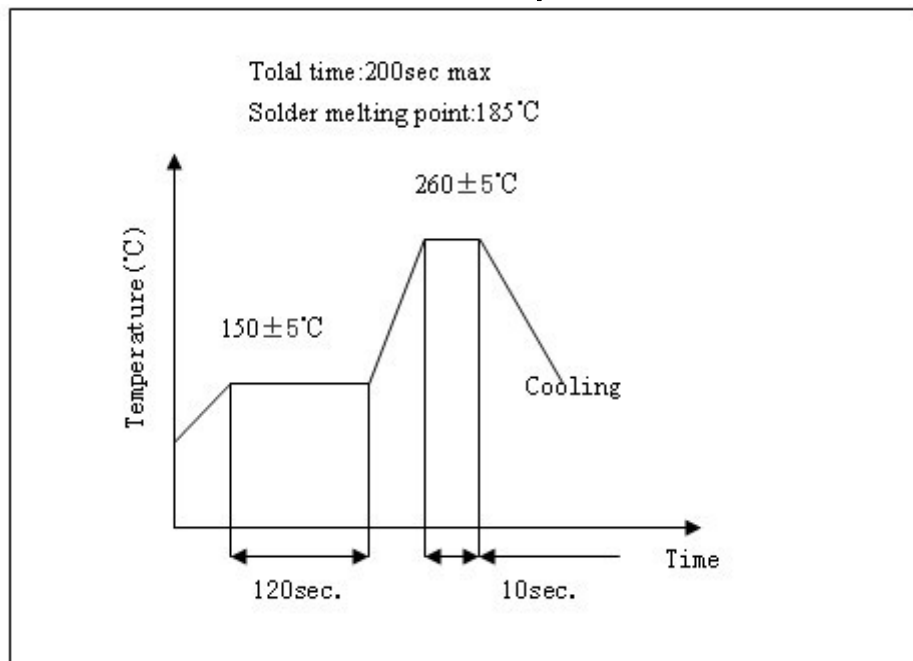
## Load Capacitance Codes

7pF: E	8pF: F	9pF: B	10pF: R
12pF: T	15pF: H	16pF: I	18pF: J
20pF: K	22pF: L	25pF: G	27pF: M
30pF: N	32pF: P	33pF: W	Series: S

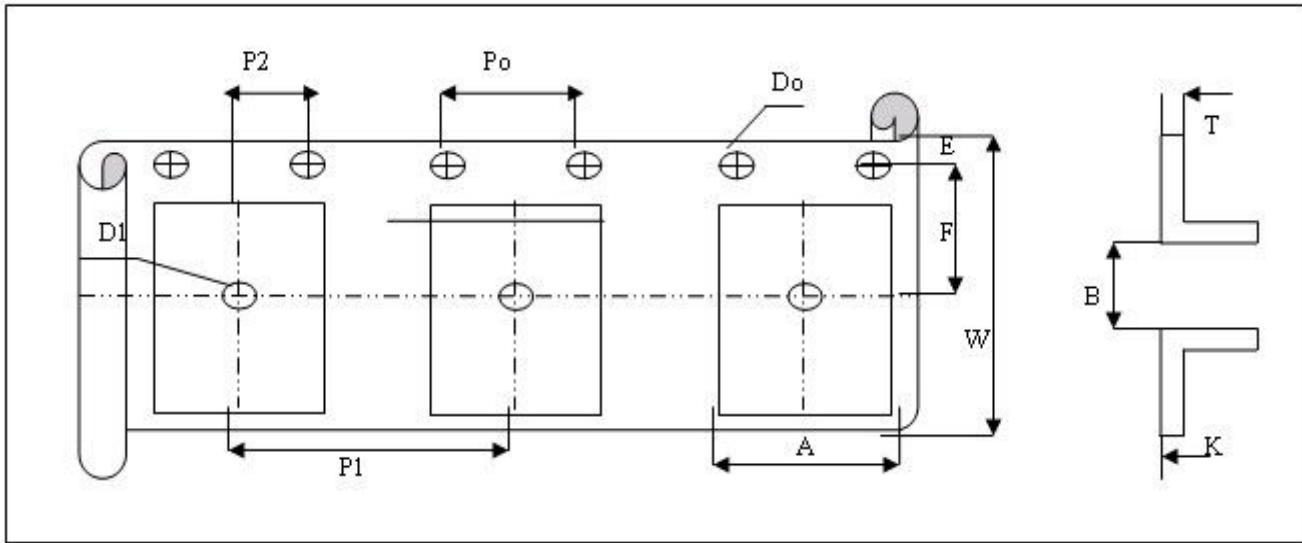
## Dimensions



## Reflow Condition (example)

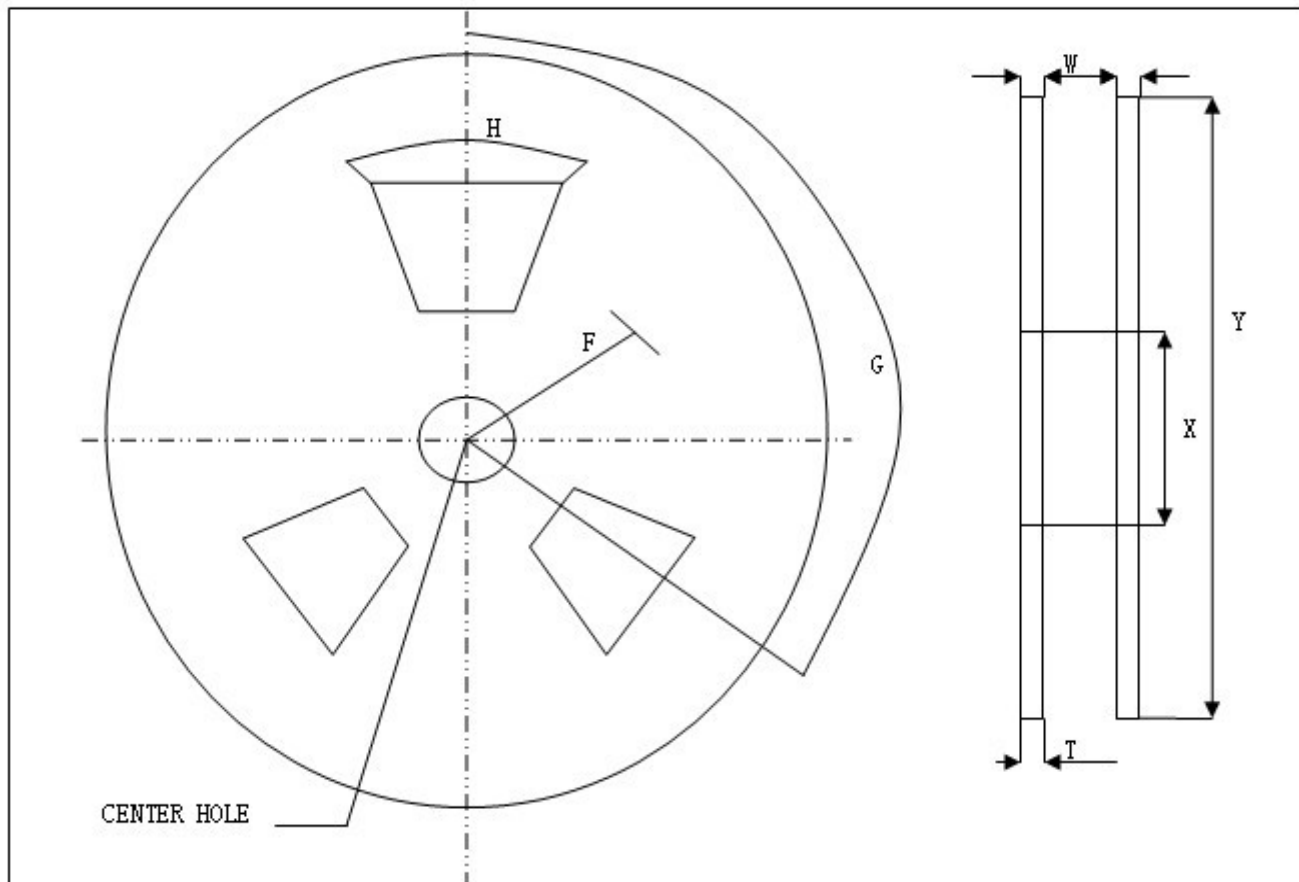


## ■ Taping Specification



Symbol	A	B	Do	D1	E	F
DIMENSION	3.2*2.5	2.8	3.5	1.5	1	1.75
Symbol	K	Po	P1	P2	T	W
DIMENSION	3.2*2.5	1	4	8	2	0.25

Unit:mm



Symbol	H	F	G	W	T	X	Y
Dimension	3.2*2.5	40°	21±0.8	120	17.5	2	50