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ISO9001
ISO14001



NTC Thermistor



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1. NTC Thermistor ?

1) Thermistor : Thermally sensitive Resistor

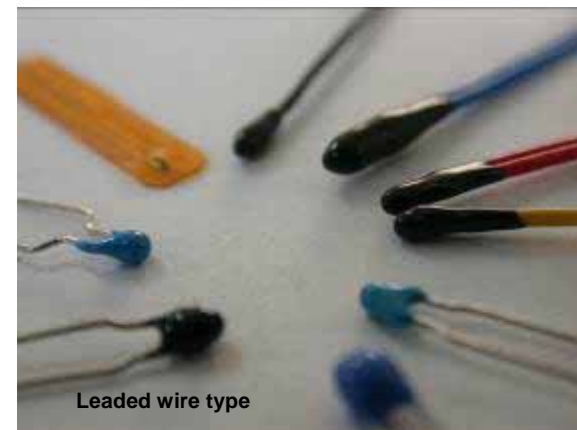
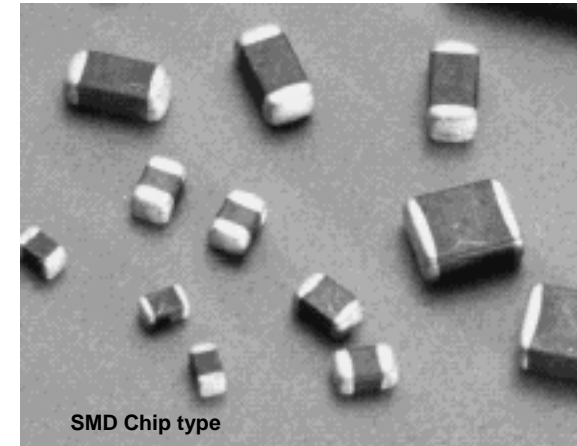
- * ,
- * ,
- * : NTC Thermistor or PTC Thermistor

2) NTC Thermistor : Negative Temperature Coefficient of Thermistor

- * _____ ,
- * Mn3O4, NiO, Co3O4, Fe2O3 ,

3)

- * : , , 가
- *
 - a. : , IC, TCXO, LCD
 - b. : ,
 - c. : ,
 - e. : CPU





2.

1) R_{25} : 25

2) R_{85} : 85

3) B

a. 25 , 가 t

b. $B_{25/50}$, $B_{25/85}$, [K,]

$$B_{25/t} [K] = \ln(R_{25} / R_t) / (1/T_{25} - 1/T_t)$$

$$T_{25} = 273.15 + 25 [K], \quad [, Kelvin]$$

4) :

a. 1 [mW]

b. , ,

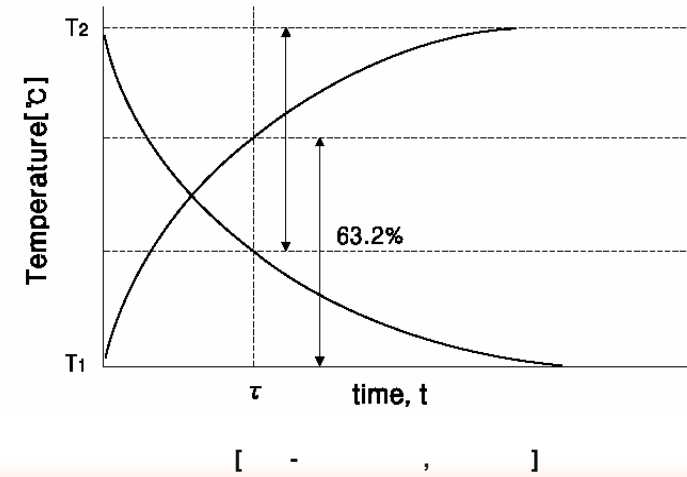
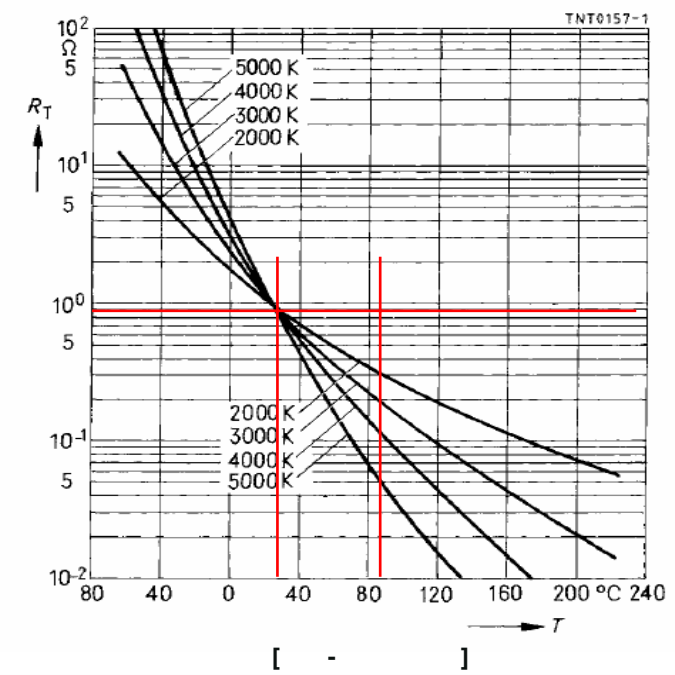
5) [25] [125]

6) 가

a. 가

b. 가 ,

63.2%



3.

1) [TCXO, Temperature Compensated X'tal Oscillator]

- AT-Cut : $\pm 30\text{ppm}$, $-40 \sim 85$

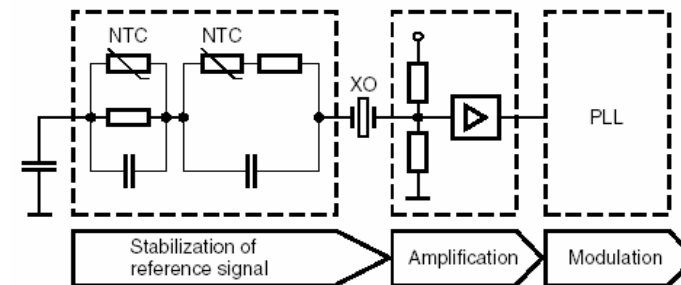
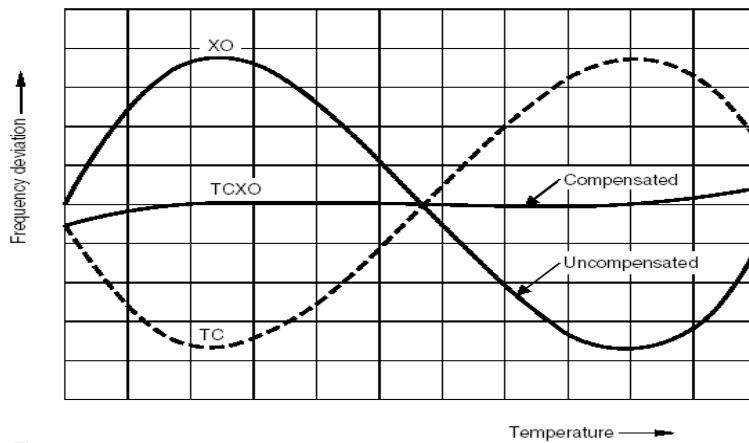
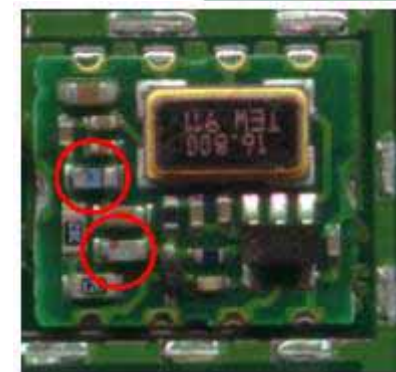
- : $\pm 2.5\text{ppm}$

- 가 [R-C]

*

* NTC Thermistor RC 가

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Region	R25	B25 /85	Type
Low Temp	22~150[]	3150K \pm 3%	1005/1608
High Temp	1.0~6.8[k]	4100K \pm 3%	



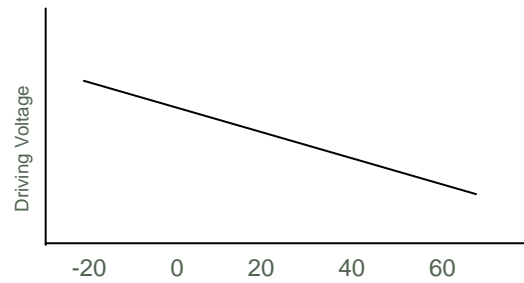
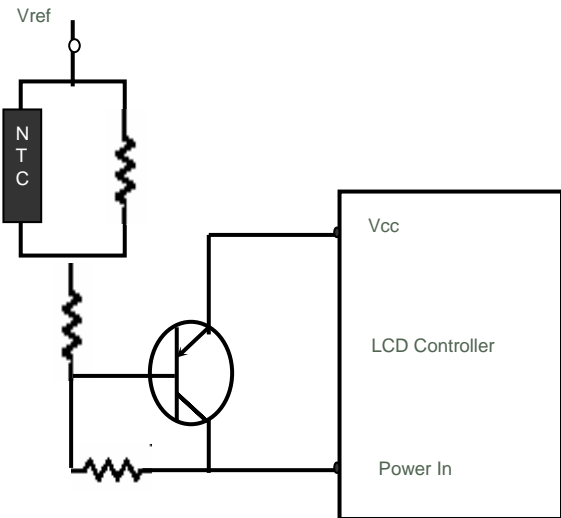
2) LCD module

- LCD[Liquid Crystal Display,] [液晶] 가

- NTC Thermistor , LCD

*	:	NTC Thermistor	LCD	가
*	:	NTC Thermistor	LCD	

- LCD NTC Thermistor
- a. 25 10k -
- b. 25 /85 가 B -



R25	B25 /85	Type
47k ~1.0M	4100K ± 1%,3%	1005/1608/2012
	4750K ± 1%,3%	



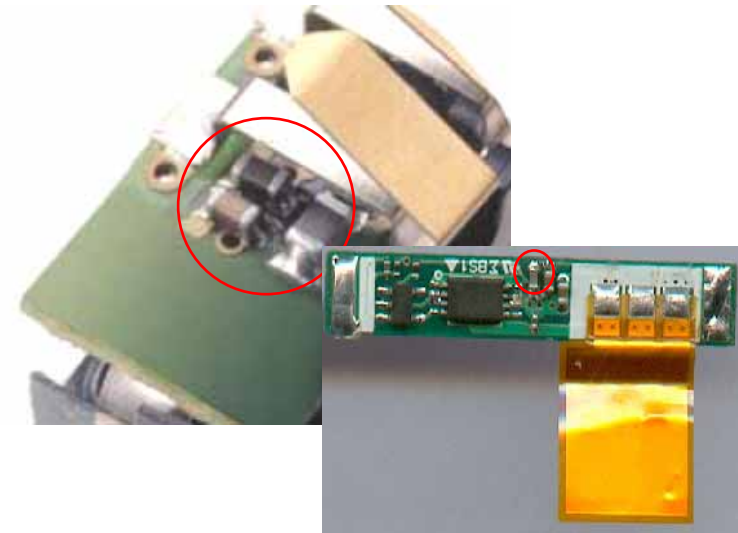
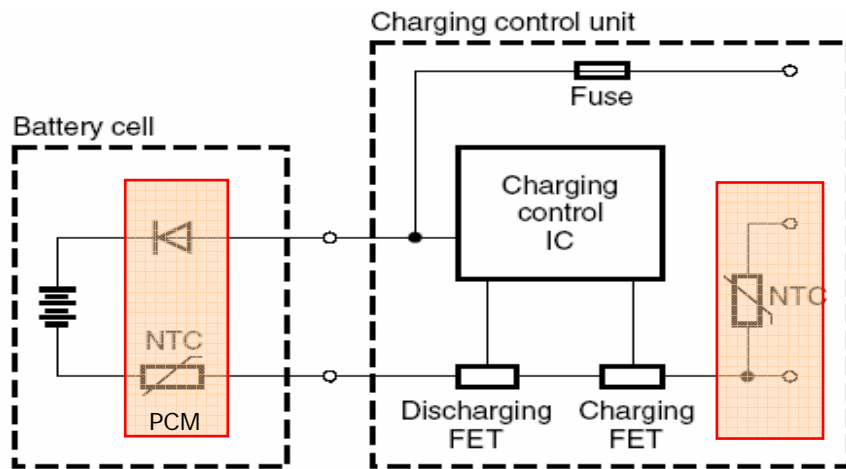
3) 2

- Li-ion 2

* Pack

, PCM [Protect circuit module]

NTC Thermistor



R25	B25 /85	Type
10k ~100k	3435K ± 1%, 3%	1005/1608/2012
	4550K ± 1%,3%	