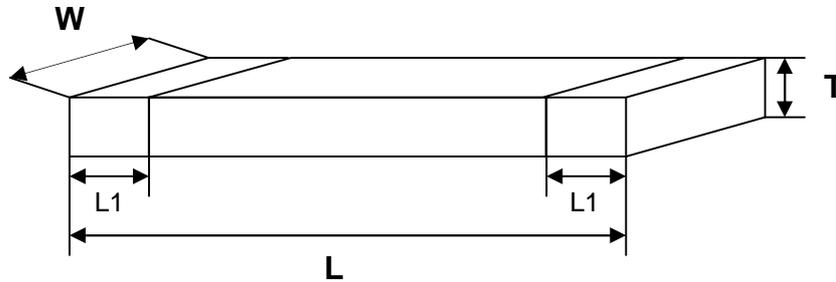
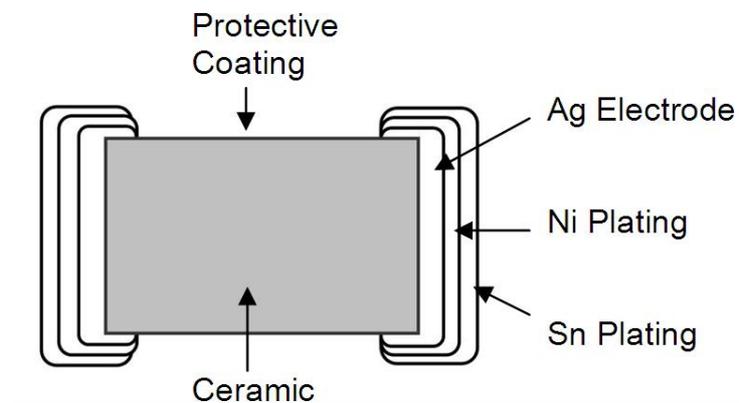


### SMD CHIP DIMENSION



ITEM	L (mm)	W (mm)	T (mm)	L1 (mm)
<b>0402 (1005)</b>	1.00 ± 0.10	0.50 ± 0.10	0.40 ± 0.20	0.15 ~ 0.30
<b>0603 (1608)</b>	1.60 ± 0.15	0.80 ± 0.15	0.70 ± 0.25	0.20 ~ 0.50
<b>0805 (2012)</b>	2.00 ± 0.20	1.25 ± 0.20	0.90 ± 0.30	0.20 ~ 0.60
<b>1206 (3216)</b>	3.20 ± 0.20	1.60 ± 0.20	0.90 ± 0.30	0.25 ~ 0.60

### SMD CHIP STRUCTURE





**ORDERING INFORMATION**

**EWTF 03 - 103 J 3I - N**

**SMD NTC Series Code :**

EWTF : Lead Free

**Chip Size ( L x W ) :**

02 (0402) – 1.0 x 0.5 mm

03 (0603) – 1.6 x 0.8 mm

05 (0805) – 2.0 x 1.25 mm

06 (1206) – 3.2 x 1.6 mm

**Resistance at 25°C :**

102 = 10 x 10<sup>2</sup> = 1,000 Ω

103 = 10 x 10<sup>3</sup> = 10,000 Ω

104 = 10 x 10<sup>4</sup> = 100,000 Ω

**Resistance Tolerance :**

F=±1% ; G=±2% ; H=±3% ; J =±5 % ; K=±10%

**B Value (K) :**

3I = 3435 ( 3000 + 435 )

1:1000	C:101~150	I:401~450	O:701~750
2:2000	D:151~200	J:451~500	P:751~800
3:3000	E:201~250	K:501~550	Q:801~850
4:4000	F:251~300	L:551~600	R:851~900
A:0~50	G:301~350	M:601~650	S:901~950
B:51~100	H:351~400	N:651~700	T:951~999

**Coating Color :**

Blank = Blue

N = New Color (Black)



## SPECIFICATION

### 0402 ( 1005 ) SIZE

Part Number	Resistance (25°C) (Ω)	B-constant (25°C/85°C) (K)	Maximum Power Rating (mW)	Dissipation Constant (mW/°C)	Operating Temp. Range (°C)
EWTF02-102□4B-N	1,000	4100	250	2.5	- 40 ~ 125
EWTF02-202□4K-N	2,000	4520			
EWTF02-103□3I-N	10,000	3435			
EWTF02-103□3R-N	10,000	3900			
EWTF02-103□4B-N	10,000	4100			
EWTF02-473□4A-N	47,000	4050			
EWTF02-683□4C-N	68,000	4150			
EWTF02-104□4A-N	100,000	4050			
EWTF02-104□4F-N	100,000	4300			
EWTF02-474□4A-N	470,000	4050			

Remark : 1. □ - Resistance Tolerance : F=±1% ; G=±2% ; H=±3% ; J =±5 % ; K=±10%.

2. Maximum Power Rating = Dissipation Constant × ( Max. Operation Temperature - 25°C ).

※ Please inquire to our sales for other specifications.

**0603 ( 1608 ) SIZE**

Part Number	Resistance ( 25°C ) ( Ω )	B-constant ( 25°C/85°C ) ( K )	Maximum Power Rating ( mW )	Dissipation Constant ( mW/°C )	Operating Temp. Range ( °C )
EWTF03-102□2S-N	1,000	2950	350	3.5	- 40 ~ 125
EWTF03-202□4C-N	2,000	4150			
EWTF03-332□3C	3,300	3150			
EWTF03-332□3F-N	3,300	3300			
EWTF03-472□3G-N	4,700	3340			
EWTF03-502□3G-N	5,000	3340			
EWTF03-682□3I-N	6,800	3435			
EWTF03-103□3I-N	10,000	3435			
EWTF03-103□3K-N	10,000	3550			
EWTF03-103□3T-N	10,000	3970			
EWTF03-223□3R-N	22,000	3900			
EWTF03-473□3S-N	47,000	3950			
EWTF03-473□4A-N	47,000	4050			
EWTF03-503□4A-N	50,000	4000			
EWTF03-104□3S-N	100,000	3950			
EWTF03-104□4A-N	100,000	4050			
EWTF03-104□4H-N	100,000	4400			
EWTF03-154□4L-N	150,000	4600			
EWTF03-204□4B-N	200,000	4055			
EWTF03-224□4B-N	220,000	4055			
EWTF03-334□4B-N	330,000	4100			
EWTF03-474□4B-N	470,000	4100			
EWTF03-564□4B-N	560,000	4100			

Remark : 1. □ - Resistance Tolerance : F=±1% ; G=±2% ; H=±3% ; J =±5 % ; K=±10%.

2. Maximum Power Rating = Dissipation Constant x( Max. Operation Temperature - 25°C ).

※ Please inquire to our sales for other specifications.



**0805 (2012) SIZE**

Part Number	Resistance (25°C) (Ω)	B-constant (25°C/85°C) (K)	Maximum Power Rating (mW)	Dissipation Constant (mW/°C)	Operating Temp. Range (°C)
EWTF05-472□3I-N	4,700	3435	400	4	- 40 ~ 125
EWTF05-502□3I-N	5,000	3435			
EWTF05-103□3I-N	10,000	3435			
EWTF05-103□3K-N	10,000	3550			
EWTF05-103□3T-N	10,000	3970			
EWTF05-223□3R-N	22,000	3900			
EWTF05-473□4A-N	47,000	4000			
EWTF05-503□4A-N	50,000	4000			
EWTF05-104□4A-N	100,000	4000			
EWTF05-204□4B-N	200,000	4100			

Remark : 1. □ - Resistance Tolerance : F=±1% ; G=±2% ; H=±3% ; J =±5 % ; K=±10%.

2. Maximum Power Rating = Dissipation Constant x( Max. Operation Temperature - 25°C ).

※ Please inquire to our sales for other specifications.