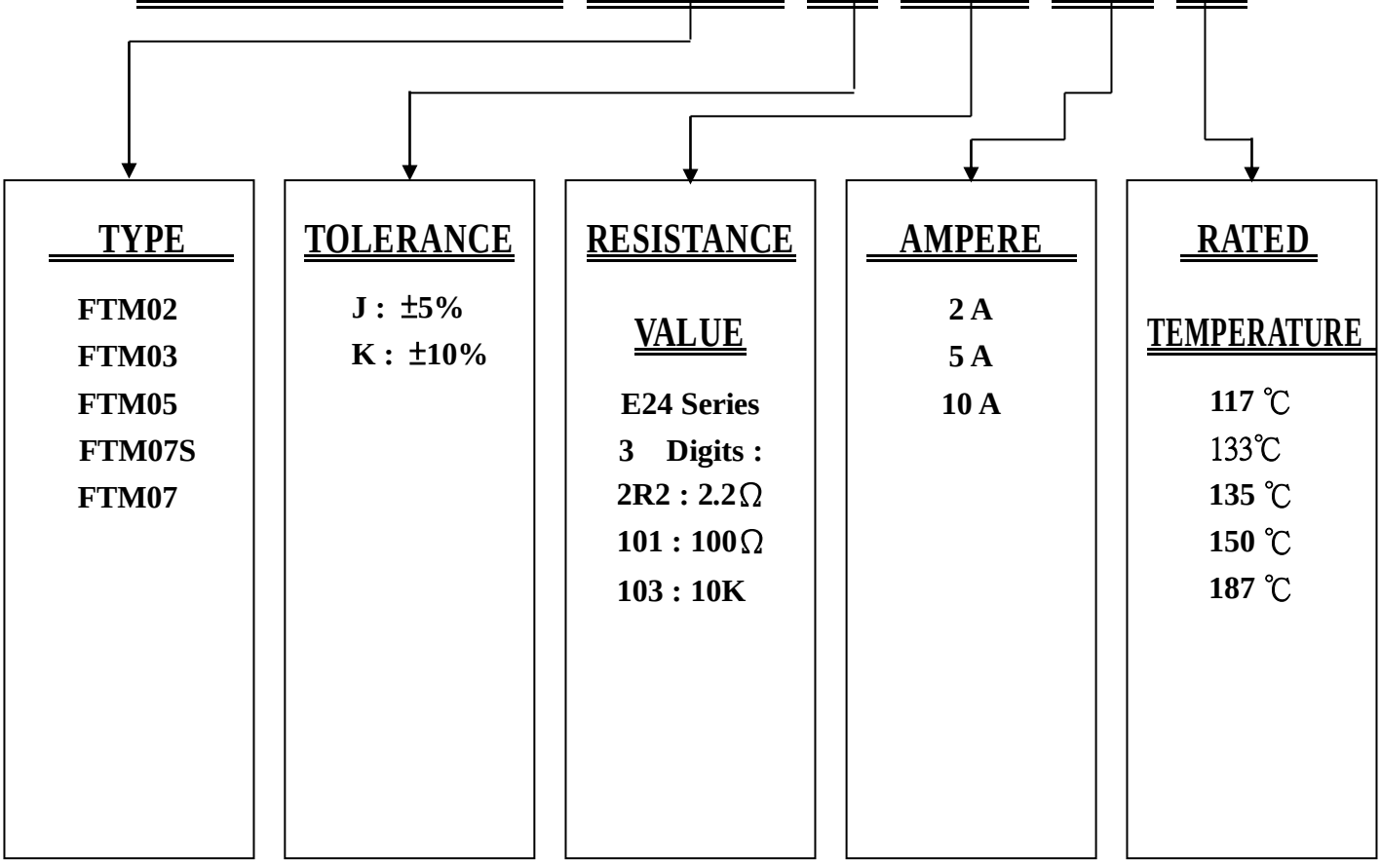
1. FEATURES

Since thermal fuses are incorporated , resistors respond quickly to overloading as well as external overheating .
These resistors also provide outstanding features against surges.
Therefore they are suitable for the prevention of inrush current for switching power supply.

2. EXPLANATIONS OF ORDERING CODE

DESCRIPTION : FTM05 5% 5.1Ω 2A 135℃

SYNTON CODE : FTM05 J 5R1 2A 135



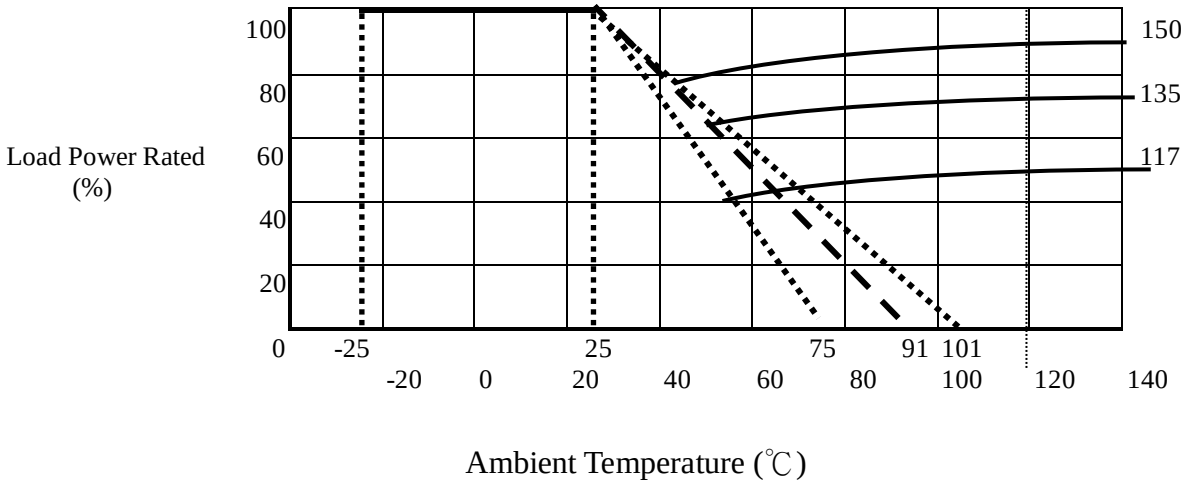
APPROVED	CHECKED	DESIGNED	REMARK	DOCUMENT NO.
Carol	May	Chen		0201010178

3. ELECTRICAL CHARACTERISTICS

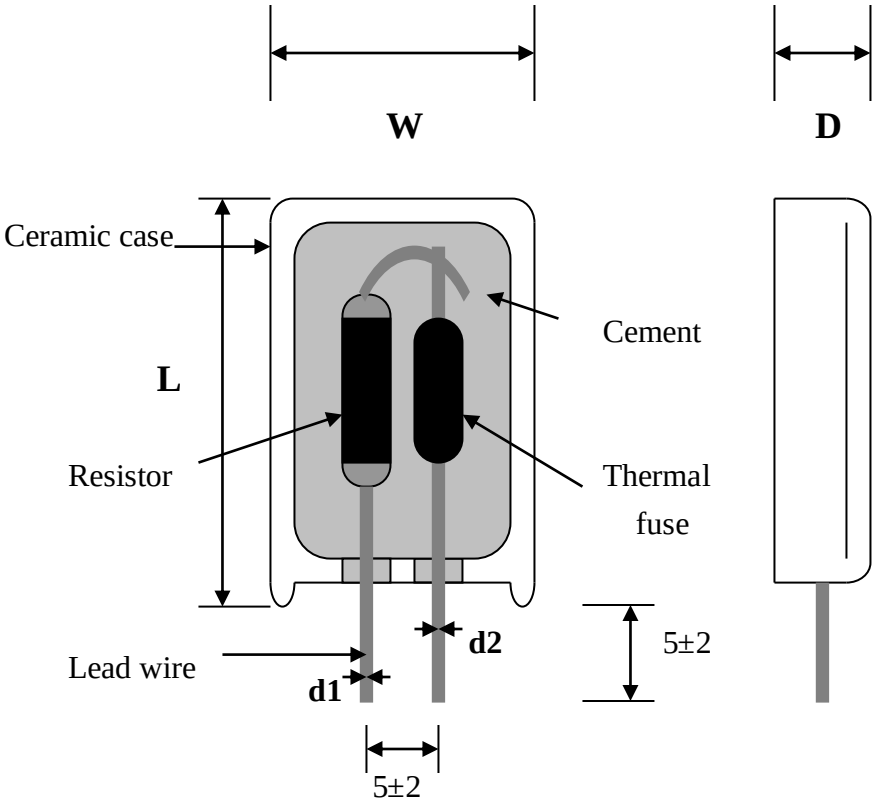
STYLE	FTM02		FTM03		FTM05			FTM07S		FTM07	
Rated wattage	1.0W	1.5W	1.5W	2W	1.6W		2.1W	1.8W	2.3W	2.2W	2.7W
Resistance Tolerance	J : ± 5% K : ± 10%										
Resistance Range	1Ω ~ 10KΩ										
Current Ration (A)	2 ~ 10 (A)										
Rated Temperature(℃)	117	135	135	150	135	133	150	135	150	135	150
Cut-off Temperature (℃)	112±4	130±4	130±4	145±4	130±4	129±2	145±4	130±4	145±4	130±4	145±4

Figure 1

4. DERATING CURVE



5. DIMENSIONS



Unit:m/m

TYPE	W	D	L	d1	d2
FTM02	11.5 ± 1.5	7.5 ± 1.5	20.5 ± 1.5	**0.5** ± 0.1	**2A (0.6 ± 0.1)**
FTM03	12.5 ± 1.5	8.5 ± 1.5	25.0 ± 1.5	**0.7** ± 0.1	
FTM05	12.5 ± 1.5	9.0 ± 1.5	25.0 ± 1.5	**0.7** ± 0.1	**5A (1.0 ± 0.1)**
FTM07S	12.5 ± 1.5	9.0 ± 1.5	25.0 ± 1.5	**0.7** ± 0.1	**10A (1.0 ± 0.1)**
FTM07	12.5 ± 1.5	9.0 ± 1.5	39.0 ± 1.5	**0.7** ± 0.1	

Figure2

6. PERFPRMAMCE

(1) T.C.R.

Test Method : Room temperature / 100℃ up

Acceptance Standard : **± 400ppm/℃**

(2) Short time overload

Test Method : Power rating **X 2.5**, for 5s

Acceptance Standard : ± (2%+0.05Ω)

(3) Solderbility

Test Method : 235℃ ± 5℃, **2s**

Acceptance Standard : 95% Coverage min.

(4) Terminal strength

Test Method : (Direct load : 20N, 10s)
(Bending test : 2cycles)

Acceptance Standard : No mechanical damages

(5) Moisture resistance

Test Method : 40℃, 90% ~ 95% RH , 500h No load

Acceptance Standard : ± (5%+0.05Ω)

(6) Load life

Test Method : Rating voltage, 25℃, 1000h, 1.5h ON / 0.5 OFF cycle

Acceptance Standard : ± (5%+0.05Ω)

- **Rated continuous Working Voltage (RCWV)**

$$= \sqrt{\textbf{power rating} \times \textbf{resistance value}}$$