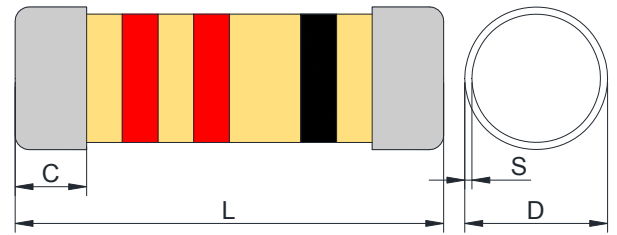


Dimensions :

Type	Size	Dimensions (mm)			
		L	D	C	S
MECF	0204	3.5±0.2	1.45±0.1	0.7±0.1	0.15±0.1
	0207	5.7±0.2	2.2±0.1	0.8±0.2	0.2±0.1
	0309	8.5±0.3	3±0.3	1.7±0.2	0.3±0.1
	0411	10.5±0.3	4±0.3	2.3±0.2	0.3±0.1
	0515	14.5±0.3	4.5±0.3	2.3±0.2	0.3±0.1



Coating Color : Beige.(米黄色)  
 Marking : Color Bands.  
 ※E-24 Series =3 bands.

Range :

TYPE	SIZE	POWER RATING	MAX. WORKING VOLTAGE	MAX. OVERLOAD VOLTAGE	RESISTANCE RANGE (E-24):J(±5%)
MECF	0204	1/8W (0.125W)	200V	400V	2.2Ω~1MΩ
		1/4 Ws (0.25W)	250V	500V	
	0207	1/4W (0.25W)	250V	500V	1.0Ω~2.2MΩ
		1/2Ws (0.5W)	300V	600V	
		1Wss(1W)	400V	600V	
	0309	1 Ws	500V	1000V	1.0Ω-10MΩ
	0411	2Ws			
0515	3Ws				

The rated voltage shall be the D.C. or A.C.(R.M.S. at power frequency) voltage which corresponds the rated power and the value of which is calculated from the formula below.

$E = \sqrt{P \times R}$  Where E: Rated voltage(V)

P: Rated power(W)

R: Nominal resistance(Ω)

Max Working Voltage=  $\sqrt{P \times R}$

Max Overload Voltage =E\*2.5

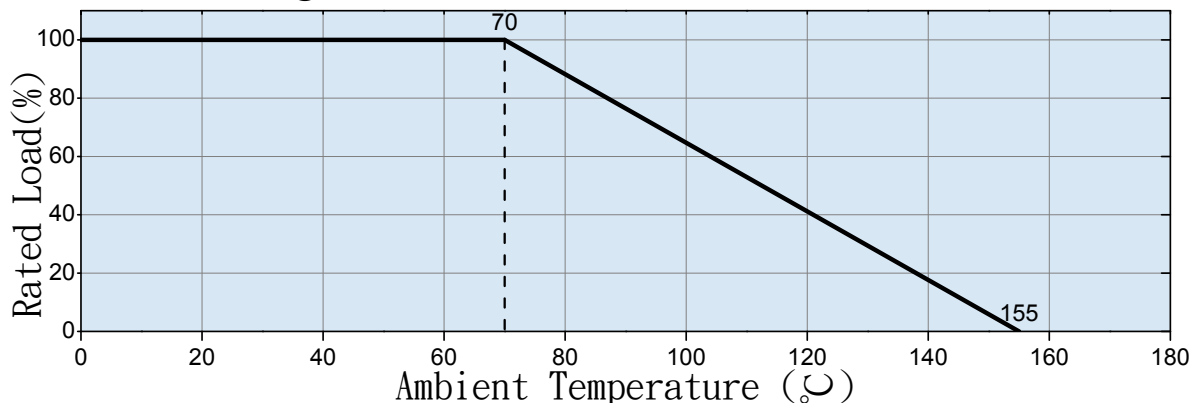
ME	CF	0309	1Ws	22R	J	TR
↓	↓	↓	↓	↓	↓	↓
Type	Type	SIZE	POWER	Resistance	J	Packaging
MELF	Carbon	0204	1/8W	1R 1Ω	G ± 2%	TR Taping Reel
		0207	1/4 Ws	10R 10Ω	J ± 5%	BU Bulk
		0309	1/4W	100R 100Ω		
		0411	1/2Ws	1K2 1K2Ω		
		0515	1Wss	1M 1MΩ		
			1 Ws	10M 10MΩ		
			2Ws			
			3Ws			

Characteristics

Item	Characteristics					Test Method
1. Operating Temp. Range 使用溫度範圍	-55°C ~ 155°C					
2. Temp. Coefficient 溫度系數	T.C.R. (ppm/°C)	+350~ -450	0~ -700	0~ -1000	+0~ -1300	JIS-C-5202; 5.2
	0204	1.0Ω~ 47KΩ	51KΩ~ 220KΩ	240KΩ~ 470KΩ	510KΩ~ 1.0MΩ	
		0207 以上	1.0Ω~ 100KΩ	110KΩ~ 330KΩ	360KΩ~ 1.0MΩ	
	3. Short time overload 短時間過負載		±(1%+0.05 Ω)			
4. Pulse overload 斷續過負載	±(2%+0.05 Ω)					Rating voltage*4 or Max. overload voltage for 10,000 cycle (1 sec. "on" 25 sec. "off"), Whichever less
5. Temperature cycling 溫度週率	±(1%+0.05 Ω)					-55°C (30 min.) / +85°C (30min.) for 5 cycle
6. Load Life in Humidity 耐濕負載	±(5%+0.05 Ω)					40°C±2°C, 90%~95% RH, 1000h, 1.5h"on"/0.5h"off" cycle
7. Load Life 壽命負載	±(5%+0.05 Ω)					70°C±2°C, 1000h, 1.5h"on"/0.5h"off" cycle
8. Resistance to soldering heat 焊接耐熱性	±(2%+0.05 Ω)					260°C±5°C, 5sec±1 sec
9. Solderability 焊接性	90% Coverage/Min					235°C±5°C, 2sec±0.5sec
10. Bending test 端子強度	±1%					Holding point width 90mm, Bending 5mm, 1time
11. High Temp. exposure 耐熱性	±2%					155°C±5°C, 2 hours
12. Non-Combustibility 不燃性	The resistors shall withstand Overload test in accordance With Article UL-94.V-0 without producing a fire hazard.					

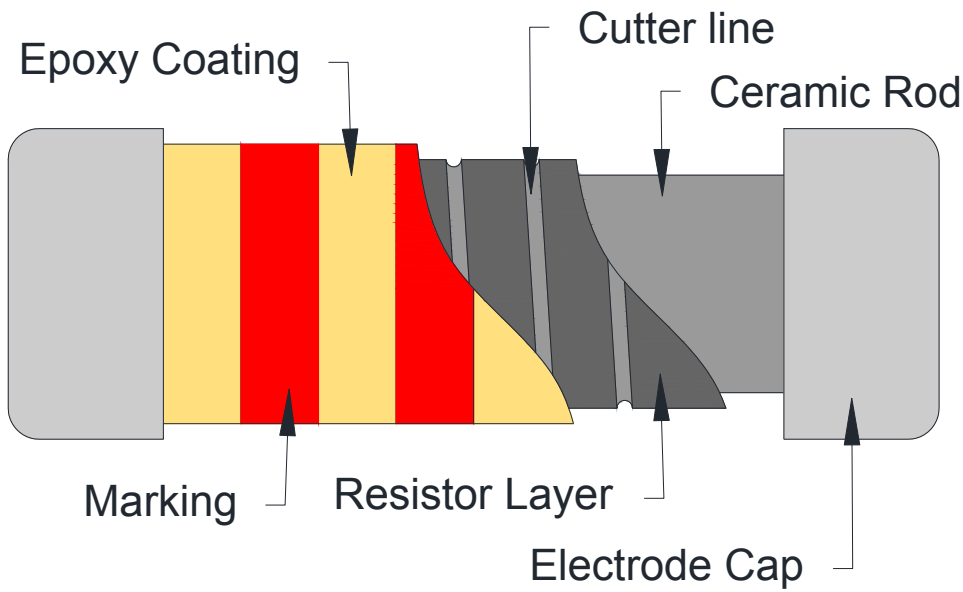
Rated power is maximum power which can be continuously loaded at specified ambient temperature 70°C, however when the ambient temperature exceeds 70°C, rated power should be determined from the derating curve

● POWER GRAPH

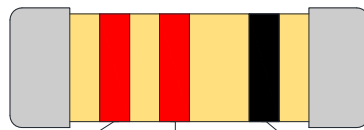


Structure diagram

The construction of resistor (MECF series) shall be as follows:

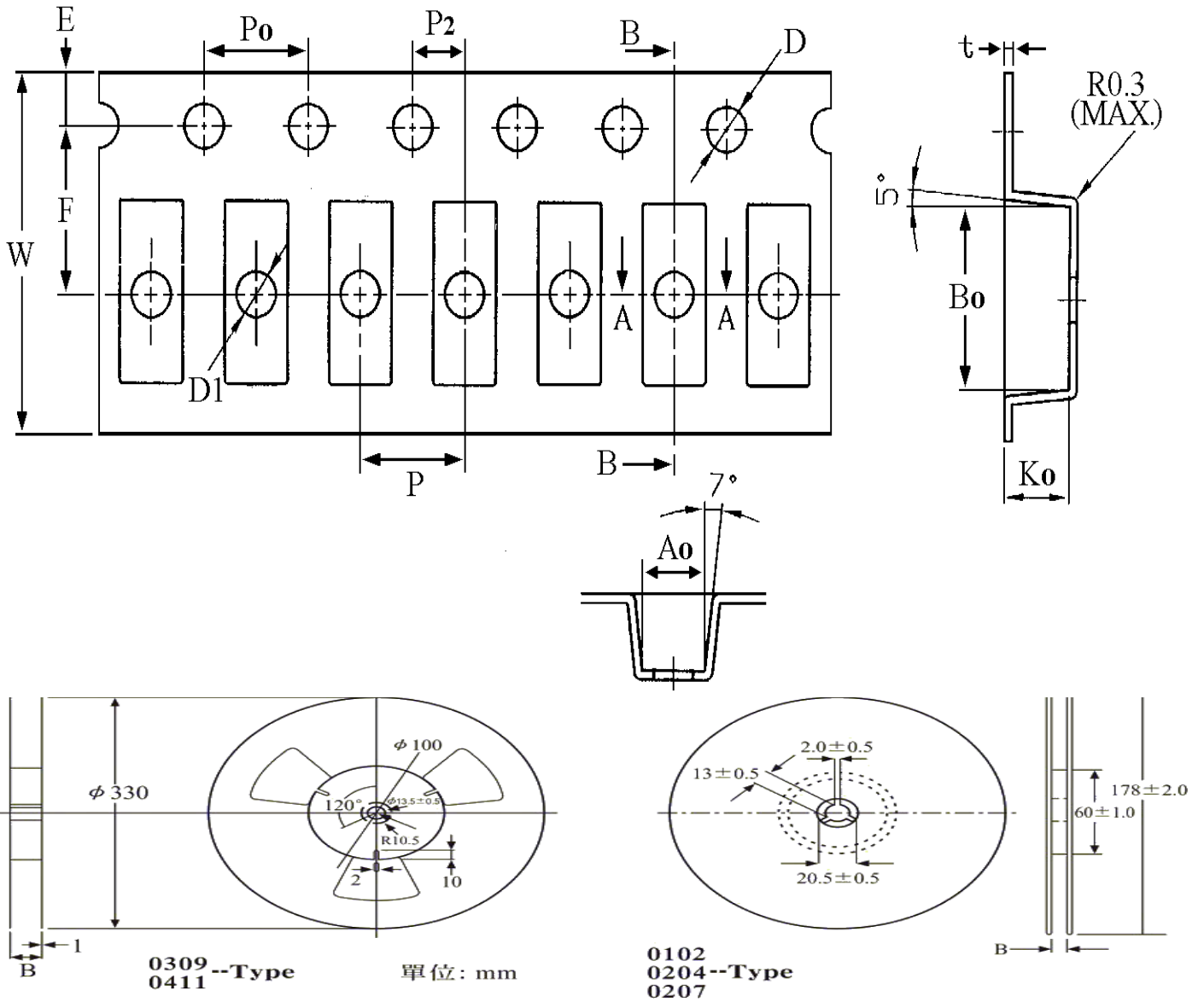


Marking



Color	1st Band	2st Band	3st Band
Black	0	0	1 Ω
Brown	1	1	10 Ω
Red	2	2	100 Ω
Orange	3	3	1K Ω
Yellow	4	4	10K Ω
Green	5	5	100K Ω
Blue	6	6	1M Ω
Violet	7	7	10M Ω
Gray	8	8	
White	9	9	
Gold			0.1 Ω
Silver			0.01 Ω

# MELF Type Packaging Specification



Type	Type				
SIZE	0411	0309	0207	0204	0102
W	24.00±0.30	16.00±0.30	12.00±0.10	8.00±0.10	8.00±0.10
P	8.00±0.10	8.00±0.10	4.00±0.10	4.00±0.10	4.00±0.10
E	1.75±0.10	1.75±0.10	1.75±0.10	1.75±0.10	1.75±0.10
F	11.5±0.10	7.50±0.10	5.50±0.05	3.50±0.05	3.50±0.05
P2	2.00±0.10	2.00±0.10	2.00±0.05	2.00±0.05	2.00±0.05
D	1.50±0.10	1.50±0.10	1.50±0.10	1.50±0.10	1.50±0.10
D1	1.50±0.10	1.50±0.10	1.50±0.10	1.50±0.10	1.50±0.10
Po	4.00±0.10	4.00±0.10	4.00±0.10	4.00±0.10	4.00±0.10
B	24.00±0.5	16.00±0.50	12.00±0.50	8.00±0.50	8.00±0.50
Ao	4.20±0.10	3.30±0.10	2.40±0.10	1.60±0.10	1.5±0.1
Bo	10.00±0.10	8.15±0.10	6.05±0.10	3.70±0.10	2.2±0.1
Ko	4.20±0.10	3.35±0.10	2.50±0.10	1.65±0.10	1.5±0.1
t	0.35±0.05	0.35±0.05	0.30±0.05	0.22±0.05	0.22±0.05

Size	TAPE/REEL	BULK	CARTON
0102	3000pcs		
0204	3000pcs		
0207	2000pcs		
0309	2500pcs	2000pcs	20000pcs
0411	2000pcs	1000pcs	10000pcs
0515	1500pcs	500pcs	5000pcs