

碳膜晶圓電阻

MELF MCF-Type
MELF Carbon Film Resistor

□ FEATURE

- ◆ Advanced thin film technology.
- ◆ Excellent overall stability: Class 0.25.
- ◆ Force fitted steel caps, tin plated on nickel barrier.
- ◆ Pure Sn termination on Ni barrier layer.
- ◆ Compatible with lead (Pb)-free and lead containing soldering processes.
- ◆ Lead (Pb)-free and RoHS compliant .

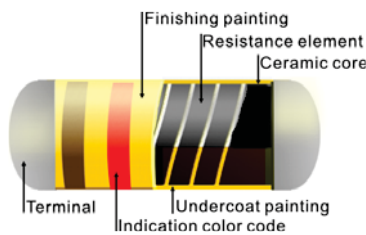
FIGURE



□ Applications

- ◆ Military
- ◆ Automotive
- ◆ Telecommunication
- ◆ Medical equipment.
- ◆ Avionics
- ◆ Space

□ CONSTRUCTION



Coating Color: Beigge
Marking: Color Bands
* E-24 Series (3 Bands)

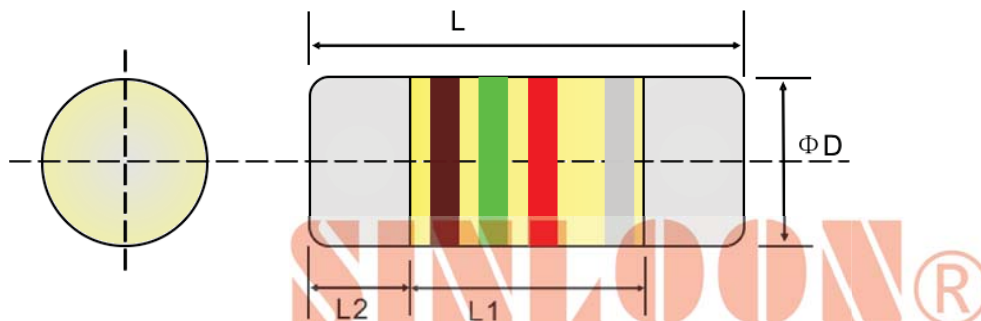
ORDERING INFORMATION

Example: VCSR04FD1R00

Power	Size	Type	Tolerance	TCR(°C)	Resistance	Packing
1/8W	0204	W-MCF04	J = ±5%	S=±5ppm	1R = 1R00	3K Reel
1/4WS	0204	V-MCF04	G = ±2%	B=±10ppm	10R=10R0	3K Reel
1/4W	0207	V-MCF07	F = ±1%	N=±15ppm	100R=100R	2K Reel
1/2WS	0207	U-MCF07		C=±25ppm	1K = 1001	2K Reel
1WSS	0207	S-MCF07		D=±50ppm	10K = 1002	2K Reel
				E=±100ppm	100K=1003	
					1M=1-004	

DIMENSION

Power	Size	Type	L	Φ D	L1	L2
1/8W	0204	W-MCF04	3.45 ±0.10	1.35 ±0.05	2.00 ±0.05	0.60 ±0.10
1/4WS	0204	V-MCF04	3.45 ±0.10	1.35 ±0.05	2.00 ±0.05	0.60 ±0.10
1/4W	0207	V-MCF07	5.90 ±0.20	2.20 ±0.15	3.40 ±0.10	1.00 ±0.10
1/2WS	0207	U-MCF07	5.90 ±0.20	2.20 ±0.15	3.40 ±0.10	1.00 ±0.10
1WSS	0207	S-MCF07	5.90 ±0.20	2.20 ±0.15	3.40 ±0.10	1.00 ±0.10



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GENERAL ELECTRICAL SPECIFICATION

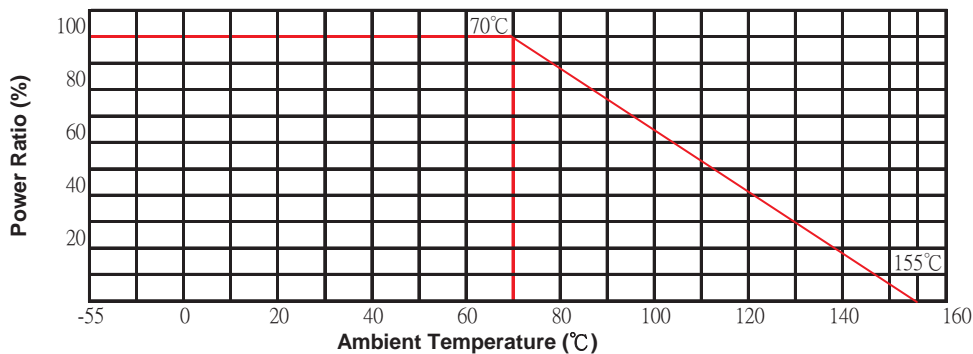
Type	Size	Power	Maximum Voltage		Resistance (Ω)	Tolerance (E-24)
			Working	Overload		
1/8W	0204	W-MCF04	200V	400V	10R ~ 2.2M	J = ±5%
1/4WS	0204	V-MCF04	250V	500V		
1/4W	0207	V-MCF07	250V	500V		
1/2WS	0207	U-MCF07	300V	600V		
1WSS	0207	S-MCF07	400V	600V		

* Mayloon is capable of manufacture the following option based on customer's requirement.

Characteristics

Item	Characteristics					Test Method	
	TCR (ppm/°C)		0 ~ 450	0 ~ 700	0 ~ 1000	0 ~ 1300	JIS-C-
1). Temperature Coefficient	0204	W-MCF04	Under 47K Ω	51K ~ 220K	240K ~ 470K	Over 510K	5202 5.2
	0204	V-MCF04					
	0207	V-MCF07	Under 100K Ω	110K ~ 1M	1.1M ~ 2.2M	Over 2.2M	
	0207	U-MCF07					
	0207	S-MCF07					
2). Short Time Overload	±(1%+0.05Ω)					5202 5.5	
3). Pulse Over Load	±(2%+0.05Ω)					5202 5.8	
4). Temperature Cycling	±(1%+0.05Ω)					5202 7.4	
5). Load Life In Humidity	±(5%+0.05Ω)					5202 7.9	
6). Load Life	±(5%+0.05Ω)					5202 7.10	
7). Resistance To Soldering Heat	±(2%+0.05Ω)					5202 6.4	
8). Solderability	90% Coverage/Min					5202 6.5	
9). Non-Combustibility	No Evidence of Flaming					UL-94 V-0	

POWER DERATING CURVE





In case resistors operating ambient temperature in excess of the temperature range -55°C ~+155°C power ratio will be derated in accordance with the figure as shown on the right.



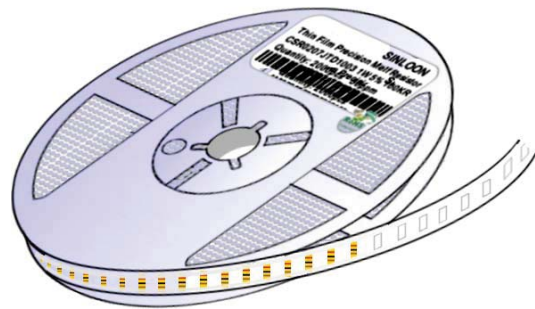
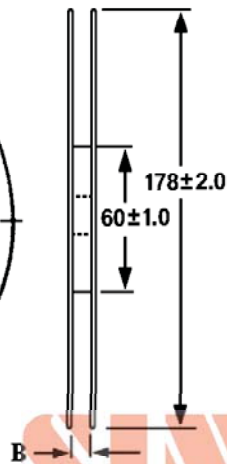
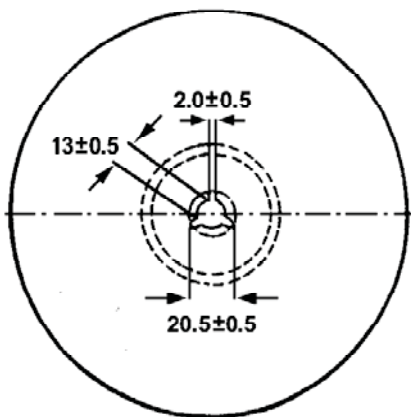
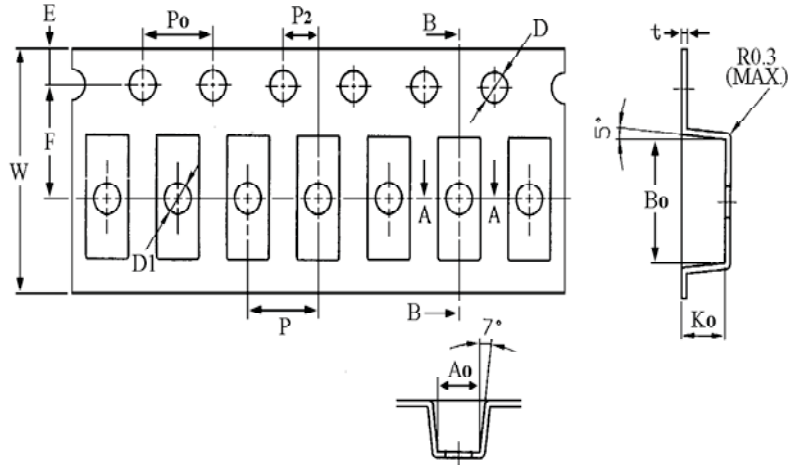
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PACKAGE SPECIFICATION

Power	Size	Type	Quantity(ea)			  品質承諾標誌 QUALITY COMMITMENT
			Paper Reel Tape		In Box	
1/8W	0204	W-MCF04	3000 pcs	7" Reel	30K	180K pcs
1/4WS	0204	V-MCF04	3000 pcs	7" Reel	30K	180K pcs
1/4W	0207	V-MCF07	2000 pcs	7" Reel	20K	120K pcs
1/2WS	0207	U-MCF07	2000 pcs	7" Reel	20K	120K pcs
1WSS	0207	S-MCF07	2000 pcs	7" Reel	20K	120K pcs

TYPE	MELF MCF	
	0204	0207
SIZE		
W	8.00±0.10	12.00±0.10
P	4.00±0.10	4.00±0.10
E	1.75±0.10	1.75±0.10
F	3.50±0.05	5.50±0.05
P2	2.00±0.05	2.00±0.05
D	1.50±0.10	1.50±0.10
D1	1.00±0.10	1.50±0.10
Po	4.00±0.10	4.00±0.10
B	8.00±0.50	12.00±0.50
Ao	1.60±0.10	2.40±0.10
Bo	3.70±0.10	6.05±0.10
Ko	1.65±0.10	2.50±0.10
t	0.22±0.05	0.30±0.05



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