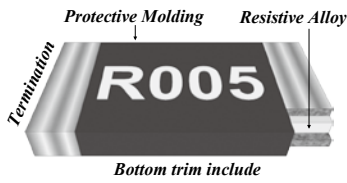


# FMF

## ■ Metal Strip Type Lead Free Current Sensing Resistors



### FEATURES

- High power rating and low TCR.
- Low resistance and high precision (1%).
- Low inductance design, less than 1.0nH available.
- Inductance less than 1.0nH.
- Excellent reliability and suitable cost.
- Suitable for lead free soldering.
- High precision trimming implement.
- RoHS compliant & Halogen Free.

### APPLICATION

- Switching model power supply.
- Battery pack.
- Notebook, Tablet PC.
- Test Instrument.
- Power Amplifier.

### PART NUMBER

FMF	25	F	P	J	R005	-	BH
Type □□□	Size □□	Tolerance □	Packing □	Watt □	R Value □□□□	TCR □	Special Code
<b>FMF</b> Metal strip	<b>06</b> 1206 <b>25</b> 2512	<b>F</b> = ±1% <b>G</b> = ±2% <b>J</b> = ±5%	<b>T</b> = Paper Tape 4Kpcs (For 1206) 5Kpcs (1206_K) <b>P</b> = Plastic Tape 4Kpcs (For 2512)	<b>F</b> = 1/2W <b>H</b> = 1W <b>I</b> = 1.5W <b>J</b> = 2W <b>K</b> = 3W	<b>XXXX</b> 4 digit  <b>Jumper</b> : 000_ _ : means blank.	<b>"-" Standard</b>  <b>X</b> = code of 2512 R001. R002.	<b>LH</b> = Standard <b>BH</b> = Low EMF  <b>K</b> = K Type  AEC-Q200 <b>LHM</b> = Standard <b>BHM</b> = Low EMF

### RATING

Type	Power Rating @ 70°C	Max. Working Current (Voltage)*	Max. Overload Current (Voltage)*	Alloy Type	Resistance Tolerance (%)	Temperature Coefficient of Resistance (ppm/°C)	Resistance (mΩ)
<b>FMF06 1206</b>	0.5W	12.9A (111mV)	28.9A (250mV)	Low EMF	±1%(F) ±2%(G) ±5%(J)	±70	3, 4, 5, 6, 7, 8, 9, 10, 15, 20, 25
		10.0A (111mV)	22.4A (250mV)	Standard		±50	5, 10, 15, 15.5, 18, 20, 25, 30
	1W	18.3A (158mV)	40.8A (354mV)	Low EMF		±70	3, 4, 5, 6, 7, 8, 9, 10, 15, 20, 25
		14.1A (173mV)	31.6A (387mV)	Standard		±50	5, 10, 15, 15.5, 18, 20, 25, 30
<b>FMF25 2512</b>	1W	31.6A (158mV)	70.7A (354mV)	Low EMF	±1%(F) ±2%(G) ±5%(J)	±70	1, 2, 2.5, 3, 4, 5, 10, 15, 20, 25
		18.3A (469mV)	40.8A (1049mV)	Standard		±50	3, 4, 5, 6, 7, 8, 9, 10, 12, 15, 20, 22, 25, 30 33, 35, 40, 50, 60, 70, 75, 80, 100, *200, *220
	2W	44.7A (224mV)	100A (500mV)	Low EMF		±70	1, 2, 2.5, 3, 4, 5, 10, 15, 20, 25
		25.8A (663mV)	57.7A (1483mV)	Standard		±50	3, 4, 5, 6, 7, 8, 9, 10, 12, 15, 20, 22, 25, 30 33, 35, 40, 50, 60, 70, 75, 80, 100, *200, *220
	3W	31.6A (245mV)	70.7A (548mV)	Low EMF		±70	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
		24.5A (812mV)	54.8A (1817mV)	Standard		±50	20 5, 6, 8, 10
					±70	12, 14, 15, 16, 18, 20, 25, 30, 33, 35, 40, 50 60, 75, 80, 100, *200, *220	

Note : \*200, \*220 Under develop

### K TYPE

Type	Power Rating @ 70°C	Max. Working Current*	Max. Overload Current* (2 sec)	Tolerance (%)	Temperature Coefficient of Resistance (ppm/°C)**	Resistance (mΩ)***
<b>FMF06_K</b>	1W	31.6A	79.1A	±1%(F) ±5%(J)	±100	1
		22.4A	55.9A		±70	2
	1.5W	38.7A	96.8A		±70	1
		27.4A	68.5A		±70	2
<b>FMF25_K</b>	2W	63.2A	158.1A	±5%(J)	±70	0.5

#### Note :

(1) RCWW = (P × R)<sup>1/2</sup> or Max. RCWW listed above, whichever is lower.

RCWW : Rated Continue Working Voltage(V) · P : Rated Power(W) · R : Resistance Value(Ω)

(2) Solder-pad and trace size should be >300 mm<sup>2</sup> and board surface temperature should not exceed 105°C when applying rated power

(3) \* : Related number are depend on specific items only.

\*\* : TCR Hot (+25~+155°C).

\*\*\* : Special requests and details please contact factory.

## ■ Metal Strip Type Lead Free Current Sensing Resistors

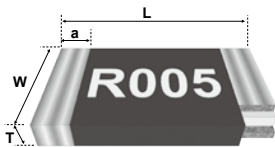
### Metal Jumper

Type	Max. Working Current	Max. Overload Current	Resistance
<b>FMF06 1206</b> (FMF06JTH000-LH)	80A	100A	Max. 0.2mΩ
<b>FMF25 2512</b> (FMF25JPJ000-LH)	120A	150A	Max. 0.1mΩ

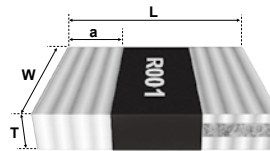
### GUIDE OF CURRENT SENSING RESISTORS

Series	Product Type	Resistance Range (<1 Ω)	Power Type	AEC Q200
<b>FMF</b>	<b>Metal Strip</b>	<b>0mΩ~220mΩ</b>	<b>V</b>	<b>V</b>
FOF	Metal Foil	2mΩ~700mΩ	V	
FBF	Metal Paste	10mΩ~910mΩ	V	
FPF	High Power	50mΩ~910mΩ	V	V
FCF-E	Normal	50mΩ~910mΩ		

### DIMENSIONS



### For FMF25 1m~2m & K Type



Note. Precise data please refer detail spec. unit: mm

Type	L	W	T	a
FMF06 3m~30m	3.10±0.20	1.65±0.20	0.60±0.20	0.60±0.20
FMF25 2.5m~220m	6.20±0.20	3.25±0.20	0.60±0.20	0.80±0.20
FMF25 3m~220m 3W	6.20±0.20	3.25±0.20	0.65±0.20	0.80±0.20

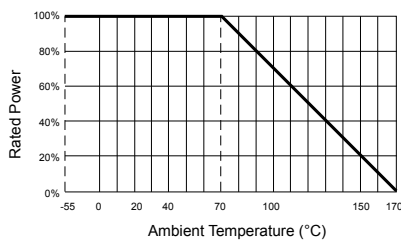
**FMF25 1m~2m** unit: mm

Type	L	W	T	a
FMF25 1m~2m	6.40±0.20	3.25±0.20	0.70±0.20	2.00±0.20
FMF25 1m~2m 3W	6.40±0.20	3.25±0.20	0.80±0.20	2.00±0.20

**KTYPE** unit: mm

Type	L	W	T	a	Marking
FMF06 1mΩ	3.20±0.15	1.60±0.15	0.32±0.15	1.10±0.25	01
FMF06 2mΩ	3.20±0.15	1.60±0.15	0.32±0.15	0.50±0.25	02
FMF25_K 0.5m	6.30±0.25	3.10±0.25	0.58±0.15	2.20±0.25	0L50

### POWER DE-RATING CURVE



Operating Temperature Range: -55 to +170 deg.C