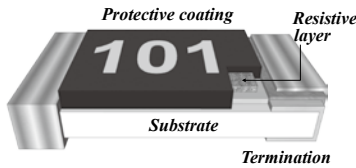


# FPF

## High Rated Power Thick-film Lead Free Chip Resistors



### FEATURES

- High power rating to 3W and compact size.
- High reliability and high precision (1%).
- Suitable for lead free soldering.
- Meet AEC-Q200, RoHS compliant & Halogen Free.

### APPLICATION

- Power supply.
- Automotive industry.
- Digital meter, Consumer electronics, M/B.
- LED Lighting.
- Industry control board.

### PART NUMBER

FPF	06	J	T	G	1R0_	L	Special Code
Type □□□□	Size □□	Tolerance □	Packing □	Watt □	R Value □□□□	TCR	
<b>FPF</b> High Power Resistors	<b>03</b> 0603 <b>05</b> 0805 <b>06</b> 1206 <b>12</b> 1210 <b>20</b> 2010 <b>25</b> 2512	<b>F</b> = ±1% <b>J</b> = ±5%	<b>T</b> = Paper tape – 5 Kpcs <b>V</b> = Paper tape – 10 Kpcs <b>W</b> = Paper tape – 20 Kpcs <b>P</b> = Plastic tape – 4 Kpcs <b>X</b> = Plastic tape – 8 Kpcs <b>Y</b> = Plastic tape – 16Kpcs <b>Q</b> = Plastic tape – 3 Kpcs (For Power boost 2010 / 2512)	<b>"-"</b> Standard  Power boost code <b>E</b> = 1/3W (0603) <b>F</b> = 1/2W (0805) <b>G</b> = 3/4W (1206) <b>I</b> = 1.5W (2010) <b>K</b> = 3W (2512)	<b>XXXX</b>  <b>&gt;=1R</b> <b>1%</b> 4 digit <b>5%</b> 3 digit ("_" means a blank)	No special code- Null Null special code- "-"  Power boost code <b>N</b> = 100ppm <b>Y</b> = 150ppm <b>L</b> = 200ppm	<b>"Null"</b> Standard  <b>M:</b> Meet AEC-Q200

### RATING

Type	Normal Type Power Rating @ 70°C	Max. RCWW	Max. Overload Voltage	Resistance Tolerance (%)	Temperature Coefficient of Resistance (ppm/°C)	Resistance Range		Standard Resistance Values
						Min.	Max.	
<b>FPF03 0603</b>	1/8W *1/3W	50V 75V	100V 125V	±1%(F)	±100	10Ω	1MΩ	E96/E24
				±1%(F)	±200	1Ω	9.76Ω	E96/E24
				±5%(J)	±200	1Ω	1MΩ	E24
<b>FPF05 0805</b>	1/4W *1/2W	150V 200V	300V 300V	±1%(F)	±100	10Ω	1MΩ	E96/E24
				±1%(F)	±150	1Ω	9.76Ω	E96/E24
				±5%(J)	±200	1Ω	1MΩ	E24
<b>FPF06 1206</b>	1/2W *3/4W	200V 250V	400V 500V	±1%(F)	±100	1Ω	1MΩ	E96/E24
				±5%(J)	±200	1Ω	1MΩ	E24
				±1%(F)	±100	1Ω	1MΩ	E96/E24
<b>FPF12 1210</b>	1/2W *3/4W	200V 250V	400V 500V	±1%(F)	±100	1Ω	1MΩ	E96/E24
				±5%(J)	±200	1Ω	1MΩ	E24
				±1%(F)	±100	1Ω	1MΩ	E96/E24
<b>FPF20 2010</b>	1W *1.5W	200V 250V	400V 500V	±1%(F)	±100	1Ω	1MΩ	E96/E24
				±5%(J)	±200	1Ω	1MΩ	E24
				±1%(F)	±100	1Ω	1MΩ	E96/E24
<b>FPF25 2512</b>	2W *3W	300V	600V	±1%(F)	±100	1Ω	1MΩ	E96/E24
				±5%(J)	±200	1Ω	1MΩ	E24

Type	Description	Max. Rated Current	Resistance Range
<b>FPF03 0603</b>	Zero Ohm Jumper	≤ 2A	< 20mΩ
<b>FPF05/06/12 0805-1210</b>	Zero Ohm Jumper	≤ 4A	< 20mΩ
<b>FPF20/25 2010-2512</b>	Zero Ohm Jumper	≤ 6A	< 20mΩ
<b>FPF25 3W 2512</b>	Zero Ohm Jumper	≤ 12A	< 20mΩ

#### Note :

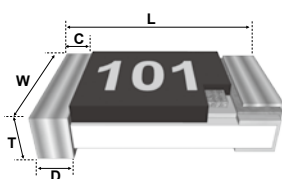
(1) RCWW = (P × R)<sup>1/2</sup> or Max. RCWW listed above, whichever is lower.

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

(2) Above 2512 size, solder-pad and trace size should be >300 mm<sup>2</sup> and board surface temperature should not exceed 105°C when applying full rated power.

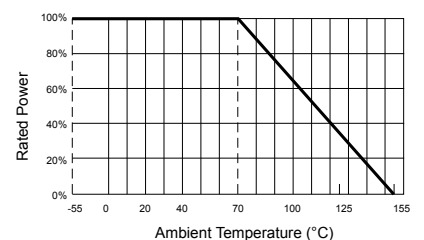
(3) 2512 Solder-pad and trace size should be >300 mm<sup>2</sup> and board surface temperature should not exceed 105°C when applying full rated power.

### DIMENSIONS



Type	L	W	C	D	T
FPF03	1.60 ± 0.10	0.80 ± 0.10	0.30 ± 0.20	0.30 ± 0.20	0.45 ± 0.10
FPF05	2.00 ± 0.10	1.25 ± 0.10	0.40 ± 0.20	0.40 ± 0.20	0.50 ± 0.10
FPF06	3.10 ± 0.10	1.60 ± 0.10	0.50 ± 0.25	0.50 ± 0.25	0.55 ± 0.10
FPF12	3.10 ± 0.10	2.60 ± 0.10	0.50 ± 0.25	0.50 ± 0.25	0.55 ± 0.10
FPF20	5.00 ± 0.20	2.50 ± 0.20	0.65 ± 0.25	0.60 ± 0.25	0.60 ± 0.10
FPF25	6.40 ± 0.20	3.10 ± 0.20	0.60 ± 0.25	1.80 ± 0.25	0.60 ± 0.15
FPF25 3W	6.40 ± 0.20	3.10 ± 0.20	0.45 ± 0.25	1.80 ± 0.25	1.10 ± 0.20

### POWER DE-RATING CURVE



Operating Temperature Range: -55 to +155 deg.C