

產品簡介

CHENMKO功率金屬晶片電阻可應用於許多先進的高科技產品，如電源供給系統、消耗性產品、電腦系統、汽車電子、醫療儀器等等。利用其極微小阻值的特性，將流過低歐姆值電阻的電流訊號轉換成電壓訊號，可作為各式各樣不同的控制應用，且轉換過程中僅需極微小的功率損耗。

本專利功率金屬晶片電阻，溫度係數可達 75 ppm/°C，溫度變化小可應用於高溫的工作環境。依不同的功率需求，可客製生產成不同的尺寸大小。電阻值的範圍約由 0.003~0.5歐姆。誤差值皆在 1%以下。

將CHENMKO功率金屬晶片電阻應用在高科技先進的產品上，更能增加其他特殊功能及提昇產品整體的效率。

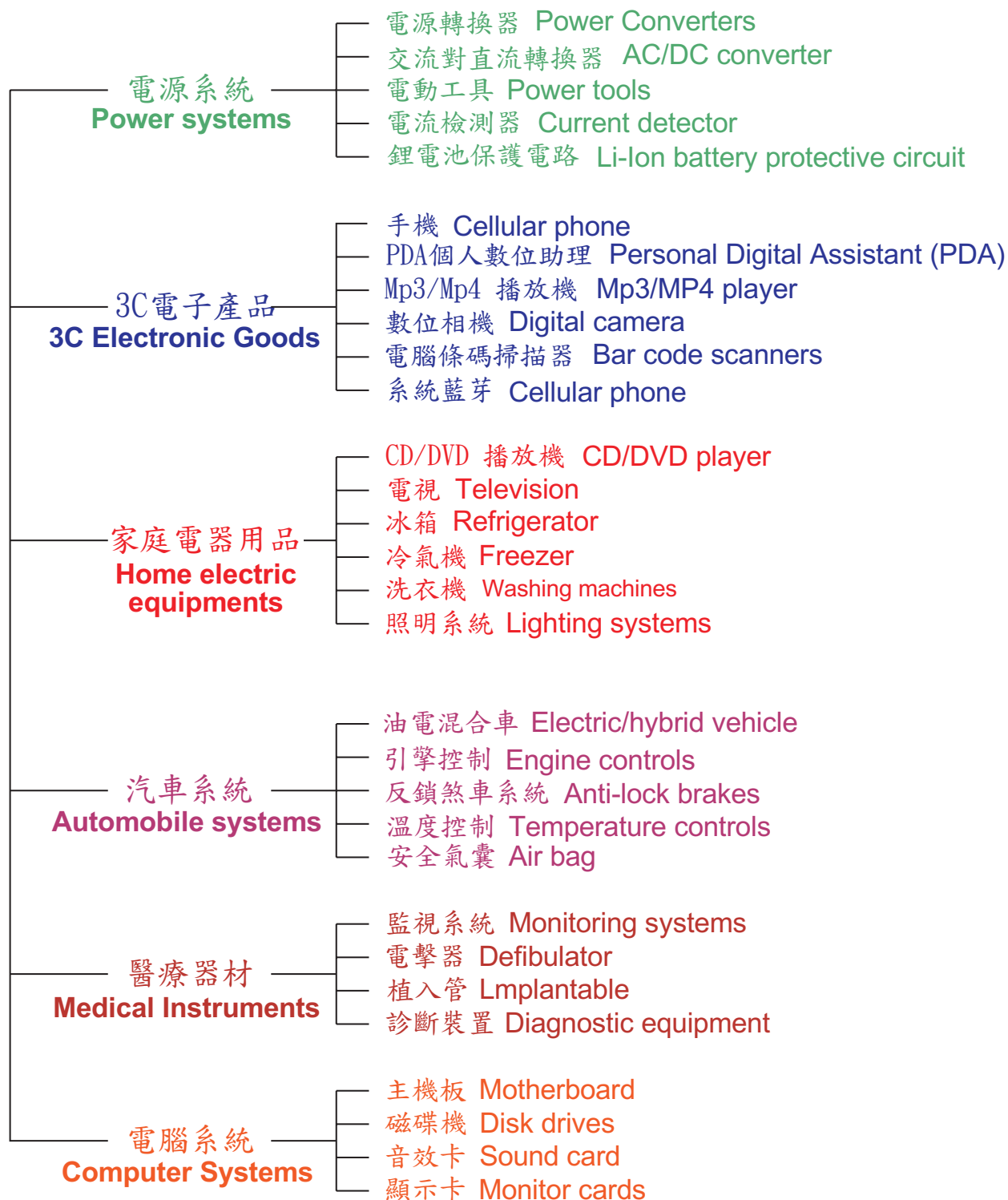
INTRODUCTION

Power metal low ohm chip resistors of CHENMKO can apply to many state-of-the-art products as power systems, 3C electronic Goods, computer systems, home electric equipments, automobile systems, medical instruments and computer systems, etc. By using the low resistance characteristic, we can transfer the current through the low ohm resistor into a voltage signal which can be designed to other control signals for various applications at the extremely low power loss condition.








Our patented Power metal low ohm chip resistors which temperature coefficient are as low as 75 ppm/°c can operate in high temperature applications. By different powers, the package sizes can be fabricated with a wide range. Resistance values can be fabricated from 0.003 Ω to 0.5 Ω and their tolerances are under 1%.

The most advanced products using our CHENMKO's power metal low ohm chip resistors can enhance the exceptional functions and efficiency more and more.

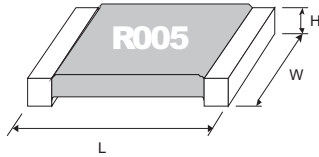
APPLICATIONS



SPECIFICATIONS

型號 GlobalModel	功率 PowerRating (W)	電阻範圍 ResistanceRange (Ω)	溫度係數 RTC (ppm/ $^{\circ}$ C)	誤差 Tolerance (%)	尺寸 Dimensions (mm)
CHPR 0805 	0.125	0.01-0.2	± 75 ± 100 ± 150 ± 275	± 0.5 ± 1 ± 3	L=2.05mm \pm 0.25mm W=1.30mm \pm 0.25mm H=0.35mm \pm 0.15mm
CHPR 0805 	0.25	0.01-0.2	± 75 ± 100 ± 150 ± 275	± 0.5 ± 1 ± 3	L=2.05mm \pm 0.25mm W=1.30mm \pm 0.25mm H=0.35mm \pm 0.15mm
CHPR 2010 	0.5	0.001-0.2	± 75 ± 100 ± 150 ± 275	± 0.5 ± 1 ± 3	L=5.10mm \pm 0.25mm W=2.55mm \pm 0.25mm H=0.65mm \pm 0.15mm
CHPR 2010 	1.0	0.001-0.5	± 75 ± 100 ± 150 ± 275	± 0.5 ± 1 ± 3	L=5.10mm \pm 0.25mm W=2.55mm \pm 0.25mm H=0.65mm \pm 0.15mm
CHPR 2010 	2.0	0.001-0.5	± 75 ± 100 ± 150 ± 275	± 0.5 ± 1 ± 3	L=5.10mm \pm 0.25mm W=2.55mm \pm 0.25mm H=0.65mm \pm 0.15mm
CHPR 2512 	1.0	0.005-0.01	± 75 ± 100 ± 150 ± 275	± 0.5 ± 1 ± 3	L=6.35mm \pm 0.25mm W=3.20mm \pm 0.25mm H=0.65mm \pm 0.15mm
CHPR 2512 	2.0	0.01-0.1	± 75 ± 100 ± 150 ± 275	± 0.5 ± 1 ± 3	L=6.35mm \pm 0.25mm W=3.20mm \pm 0.25mm H=0.65mm \pm 0.15mm

DIMENSIONS

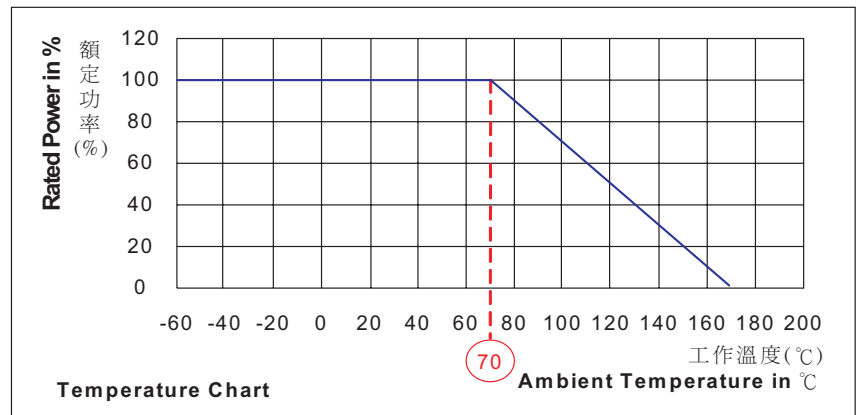
	Code	Dimensions (mm)		
	Letter	0805	2010	2512
	L	2.05 ± 0.25	5.10 ± 0.25	6.35 ± 0.25
	W	1.30 ± 0.25	2.55 ± 0.25	3.20 ± 0.25
	H	0.35 ± 0.15	0.65 ± 0.15	0.65 ± 0.15

PERFORMANCE

測試項目 TEST ITEM	測試條件 CONDITIONS OF TEST	限制條件 TEST LIMITS
溫度衝擊 Thermal Shock	-60°C to + 150°C, 1000 cycles, 15 minutes at each extreme	±0.5%
短時間過載 Short Time Overload	5 x rated power for 5 seconds	±0.5%
低溫存放 Low Temperature Storage	Kept - 60°C for 24 hours	±0.5%
高溫曝曬 High Temperature Exposure	Kept + 170°C for 1000 hours	±0.5%
工作溼度 Bias Humidity	+ 85°C, 85% RH, 10% Bias, 1000 hours	±0.5%
機械搖動 Mechanical Shock	100G's for 6 milliseconds, 5 pulses	±0.5%
振動 Vibration	Frequency varied 10 to 2000Hz in one minute, 3 directions, 12 hours	±0.5%
加載生命週期 Load Life	1000 hours @ rated power, + 70°C, 1.5 hours "ON", 0.5 hours "OFF"	±1.0%
耐焊錫溫度 Resistance to Solder Heat	+ 260°C Solder, 10 - 12 second dwell, 25mm/second emergence	±0.5%
抗溼度 Moisture Resistance	MIL-STD-202, Method 106, 0% power, 7a and 7b not required	±0.5%

TECHNICAL SPECIFICATIONS

Parameter	Unit	Characteristics
Operating Temperature Range	°C	- 60°C ~ + 170°C
Maximum Working Voltage	V	$(P \cdot R)^{1/2}$



PACKAGING

Globa Model	Tape Width	Dimeter	Pieces/Reel
CHPR 0805	8mm	178mm	4000
CHPR 2010	12mm	178mm	2000
CHPR 2512	12mm	178mm	1000