

▶ 产品特点与应用 Features and applications

◆ **高功率、耐冲击及功耗小；**

High power, shock resistant, low power loss;

◆ **耐高温、低温漂及高精度稳定性强；**

High temperature endurance, ultra-low TCR,
high precision & superior stability;

◆ **工作温度范围：-65°C ~ +170°C；**

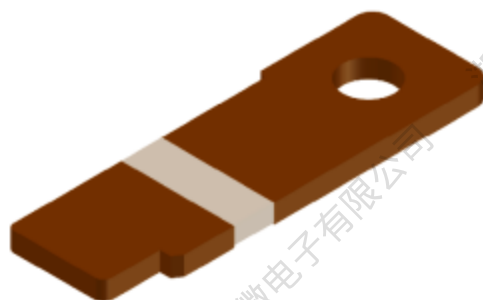
Operating temperature range: -65°C ~ +170°C;

◆ **无铅，符合 ROHS 要求，可非标定制；**

Lead free, ROHS compliant, Customizable;

◆ **符合 AEC-Q200 特性测试。**

AEC-Q200 qualified.



主要应用于 Applications:

● **电子电路中的电流采样和过流保护；**

Current sampling and overcurrent protection in electronic circuits;

● **新能源汽车控制电路和充电桩电路/传统汽车控制电路；**

New energy vehicle control circuit and charging station circuit/ traditional vehicle control circuit;

● **变频器及伺服电机控制电路；**

Inverter and servo motor control circuit;

● **开关电源、测量及测试仪器；**

Switching power, measuring and testing instruments;

● **锂电池、太阳能及通讯电源等控制电路；**

Control circuits for lithium batteries, solar energy, and communication power sources;

● **家用电器等多个领域。**

Household appliances, etc.

规格型号 Part Number Information

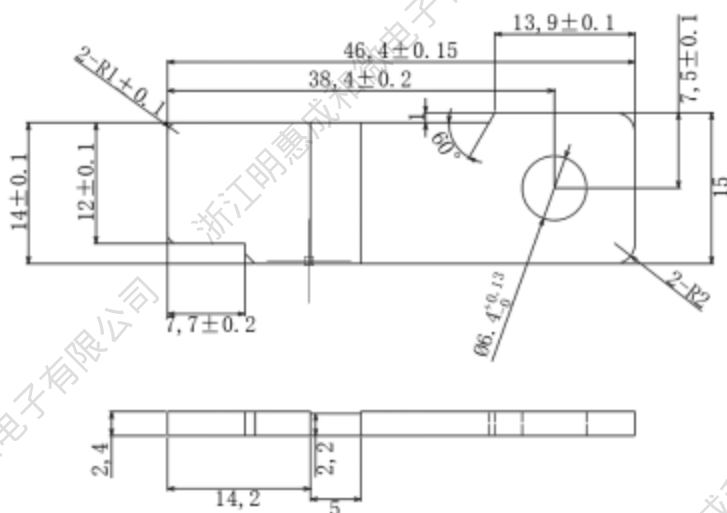
EA **46** **0M07** **PF** **J** **F** **B**
【1】 **【2】** **【3】** **【4】** **【5】** **【6】** **【7】**

1	2	3	4	5	6	7
系列 Category	尺寸 Size	电阻 Resistance	功率 Power	精度 Tolerance	温度系数 TCR	包装 Package
EA	46=4615	0m07=0.07 mΩ	PF=15W	J=±5%	F=±150-159ppm/°C	B=散装 bulk T=卷盘 reel P=托盘 tray

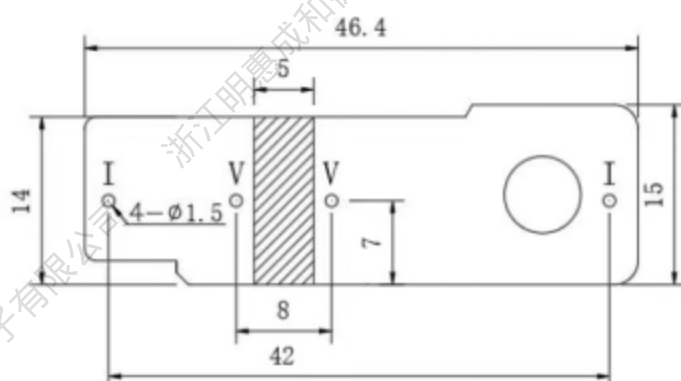
电气特性 Electrical characteristics

系列 Category	尺寸 Size	电阻(mΩ) Resistance	材料 Material	P70°C Power (W)	温度系数 (ppm/°C) TCR
EA	4615	0.07	Mn	15	±150

外形尺寸 Outline dimension



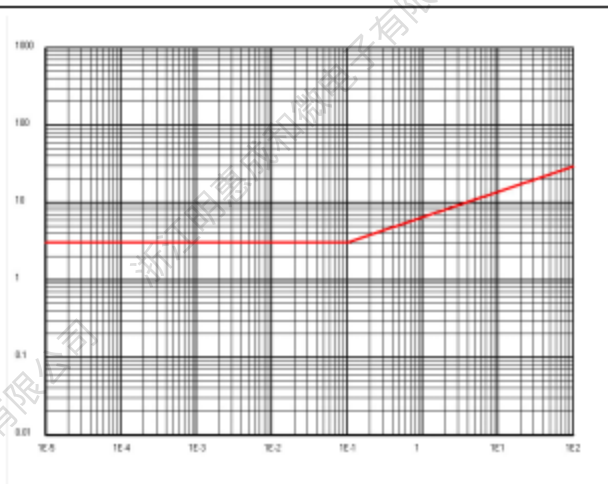
测试点位置 Test Point



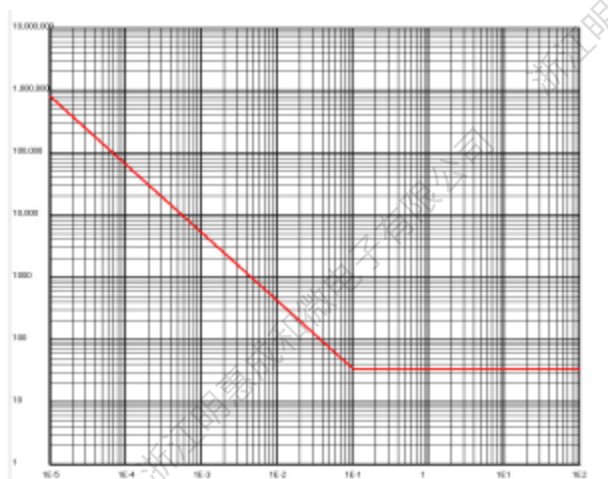
试验和要求 Tests and Requirements

NO.	测试项目 Test Item	条件 Test Condition	阻值变化极限 Limit	参考标准 Reference
1	阻值 Resistance	在室温 $25^{\circ}\text{C} \pm 5^{\circ}\text{C}$ 下测量电阻值 Measured at room temperature $25^{\circ}\text{C} \pm 5^{\circ}\text{C}$	在规定值内 Within Spec.	IEC60115-1 6.1
2	温度系数 TCR	测量点 25°C 和 $+125^{\circ}\text{C}$ Measurement $25^{\circ}\text{C}, +125^{\circ}\text{C}$; reference $+25^{\circ}\text{C}$	在规定值内 Within Spec.	MIL-STD-202 Method 304
3	短时过载 Short time overload	5 倍额定功率, 5s 5 times of the rated power for 5 seconds	$-1\% \leq \Delta R \leq 1\%$	IEC60115-1 8.1
4	高温存储 High Temperature Exposure	1000 小时 170°C , 不加载 1000 hours @ 170°C , Un-powered	$-1\% \leq \Delta R \leq 1\%$	MIL-STD-202 Method 108
5	温度循环 Temperature cycling	$+55^{\circ}\text{C}$ (15 min) $+155^{\circ}\text{C}$ (15min), 1000 循环 Dwell Time 15 minutes, 1000 cycles	$-1\% \leq \Delta R \leq 1\%$	JESD22 Method JA-104
6	负荷寿命 Operational Life	$70^{\circ}\text{C} \pm 2^{\circ}\text{C}$, 额定功率通电 1.5H, 断电 0.5H, 1000H $70^{\circ}\text{C} \pm 2^{\circ}\text{C}$, 1000 hours at $70 \pm 2^{\circ}\text{C}$, applied rated power, 1.5 hours on, 0.5 hour off	$-1\% \leq \Delta R \leq 1\%$	MIL-STD-202 Method 108
7	机械冲击 Mechanical Shock	100 g's, 6 ms, 半正弦波 12.3ft/s Half-sine; Velocity change: 12.3ft/s 各方向 3 次 (18 次) 3 shocks in each direction along the 3 mutually perpendicular axes (totally 18 times)	$-1\% \leq \Delta R \leq 1\%$	MIL-STD-202 Method 213
8	震动试验 Vibration	10 Hz 到 2000 Hz, 20min, 3 轴, 12 周期 5g's for 20 minutes, 10Hz~2000Hz, 12cycles each of 3 orientations	$-1\% \leq \Delta R \leq 1\%$	MIL-STD-202 Method 204
9	高温高湿 Biased Humidity	$+85^{\circ}\text{C}$, 85% RH, 10% 额定功率, 1000 h 10 % of rated power, 1000h	$-1\% \leq \Delta R \leq 1\%$	MIL-STD-202 Method 103

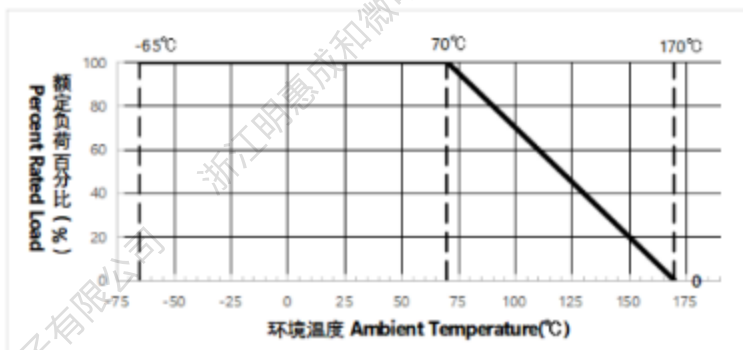
脉冲能量图 Pulse Energy Pattern



► 脉冲功率图 Pulse Power Diagram



► 降耗曲线 Derating Curves of Dissipation



► 包装 Packaging

散装 Bulk。