

## **RESI Products** Advanced Design Concepts

### **1. High Reliable Ignition Performance**

The ignition performance is great, with an ignition temperature of over  $600^{\circ}$ C and this high temperature will keep longer than  $500\mu$ s.

### 2. Excellent Tolerance

The max. tolerance is 7%, typical tolerance is 2% -3%.

# 3. The highest igniting temperature has a small mean square deviation

Consistency within batches of mass-produced parts (mean square deviation less than 20, inter batch consistency can reach up to 45).

### 4. Substrate is made of aluminum oxide, high terminal strength

RESI' s DHDZ uses aluminum oxide substrate, which has higher strength compared to FR4 substrate, and can better ensure the mechanical and electrical performance of the resistor during transportation and storage. The bottom electrode copper layer adopts vacuum sputtering technology, achieving molecular-level contact between the electrode and the substrate. The terminal strength is higher, and it is not easily to fall off or be damaged after soldering.

### 5. The unique insulation layer decelerate heat dissipation

The thermal conductivity of alumina substrate is high. In order to prevent the heat dissipation of the resistive element from the substrate, a unique insulation layer is applied. By introducing advanced process equipment, the surface flatness of the insulation layer is ensured, which is more conducive to reducing the stress of the element.

Size	R	Aluminum Electrolytic Capacitor 100uF			Aluminum Capacitor 44uF(Typical Value)		
		100% Ignition Voltage V <sub>F</sub> (V)	Safe Voltage (V)	lgnition Energy (mJ)	100% Ignition Voltage V <sub>F</sub> (V)	Safe Voltage (V)	lgnition Energy (mJ)
DHDZ0805L2R00G63C	2Ω	7.9	5.4	3.09	11.6	8.5	2.95
DHDZ0805L4R00G63A	4Ω	11.0	9.5	6.0	14.1	12.1	4.4
DHDZ0805L6R00G63A	6Ω	13.6	12.1	9.2	19.5	16.7	8.34
DHDZ0805L8R00G63B	8Ω	14.3	12.2	10.23	18.8	16.8	7.8