High Power Current Sensing Resistors **ERJD1 / ERJD2**

The ERJD series achieves high power and low TCR using a wide terminal electrode structure. Wide terminal construction ensures high solder-joint reliability and excellent heat dissipation. Additionally, low TCR makes this series precise and suitable for high power current detection. The series comes in two sizes with resistance range of 10 $m\Omega$ to 200 $m\Omega$ and power up to 2 Watts.



Best-in-class for high demanding applications



Automotive

- Electrical control unit (ECU)
- Anti-lock braking system
- Headlights



Industrial

- Power supply
- DC/DC converter
- Motor Control



Building Automation

- Inverter
- Power Supply

High power by unique structure

Compared to conventional chip resistors, ERJD1/ERJD2 have a wide terminal construction which means the terminals are on the long side of the body. In combination with a parallel internal structure of two or three resistors, this results in a much better heat dissipation, which in turn results in much higher power ranges.



Overview

- High solder-joint reliability by wide terminal construction
- Excellent heat dissipation characteristics by wide terminal construction
- Soft resin technology for best solder joint reliability
- Suitable for small size/high power current detection
- High power and low TCR
- AEC-Q200 compliant

Key Features

- Power rating of up to 2 W
- Resistance range of 10 m Ω to 200 m Ω (E24)
- Low TCR of ±100 ppm/°C
- Tolerance of 1% to 5%
- Ambient temperature -55 + 155 °C

Product Range









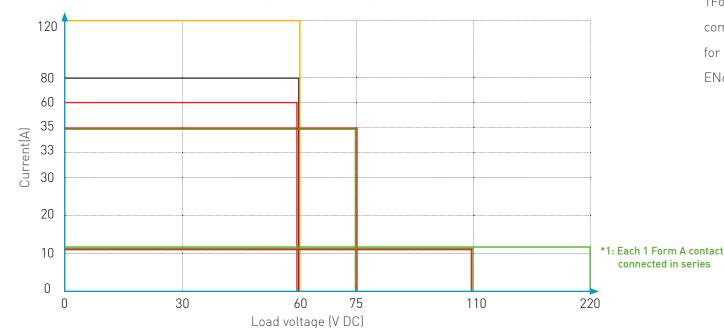


Series	HE-V	HE-S	HE-Y5	HE-Y6	HE-N (Y7)
Switching current	20A DC	35A AC	48A AC	90A AC	120A AC
Dimensions	41x50x39,4mm	30x36x40mm	38x33x36,3mm	38x33x38,8mm	50x40x43mm
Holding Power*	210mW	170mW	310mW	310mW	400mW

^{*}with reduced coil holding voltage

DC load performance

Conditions: resistive load, electrical expected life of 10⁴ cycles (reference value)



Panasonic INDUSTRY

Key Features

- Galvanic Seperation
- De-Electric Strength and protection against surge voltages
- Extreme low contact resistance

HE-S unique relay structure:

1FormB mirror contact compliant with EN60947-4-1 for safety circuits, conform to EN61851-1

