Current sensing Double-sided resistive elements structure type

High power Down sizing

Anti solder joint crack

AEC-Q200

ERJ*BW series

Small case size, low resistance, and high power by double-sided resistive elements structure



[Achieved smaller case size(1206 \rightarrow 0805) than conventional type for 10 m Ω]

PCB area reduction

1. Down sizing 2. Weight saving 3. Cost saving



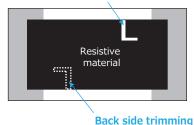
Realized small current sensing resistors by double-sided resistive elements structure

Double-sided resistive elements structure

Protective Resistive coating element Terminal

Alumina substrate

[Top view]
Front side trimming



- By original double sided resistive trimming "The front and back symmetrical double L-shaped trimming" process, load concentration can be avoided.
- Achieved small size & high power and overload characteristics.

Specifications

Part No.	Size (inch)	Power rating (W)	Resistance tolerance (%)	Resistance range (Ω)	TCR (x10 ⁻⁶ / ℃)	Category temp. range (°C)
ERJ2BW	0402	0.25	\pm 1, \pm 2, \pm 5	47 m to 100 m	0 to +300	
ERJ3BW	0603	0.33	± 1, ± 2, ± 5	20 m to 200 m	$20m\Omega \le R < 39m\Omega$: 0 to +250 $39m\Omega \le R \le 100m\Omega$: 0 to +150	
ERJ6BW	0805	0.5	± 1, ± 2, ± 5	10 m to 100 m	$\begin{array}{ll} 10m\Omega \leq R < 15m\Omega & : 0 \text{ to } +300 \\ 15m\Omega \leq R \leq 100m\Omega & : 0 \text{ to } +200 \end{array}$	-55 to 155
ERJ8BW	1206	1.0	± 1, ± 2, ± 5	10 m to 100 m	$\begin{array}{ll} 10m\Omega {\leq} R {<} 20m\Omega & :0 \text{ to } +200 \\ 20m\Omega {\leq} R {<} 47m\Omega & :0 \text{ to } +150 \\ 47m\Omega {\leq} R {\leq} 100m\Omega & :0 \text{ to } +100 \end{array}$	

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