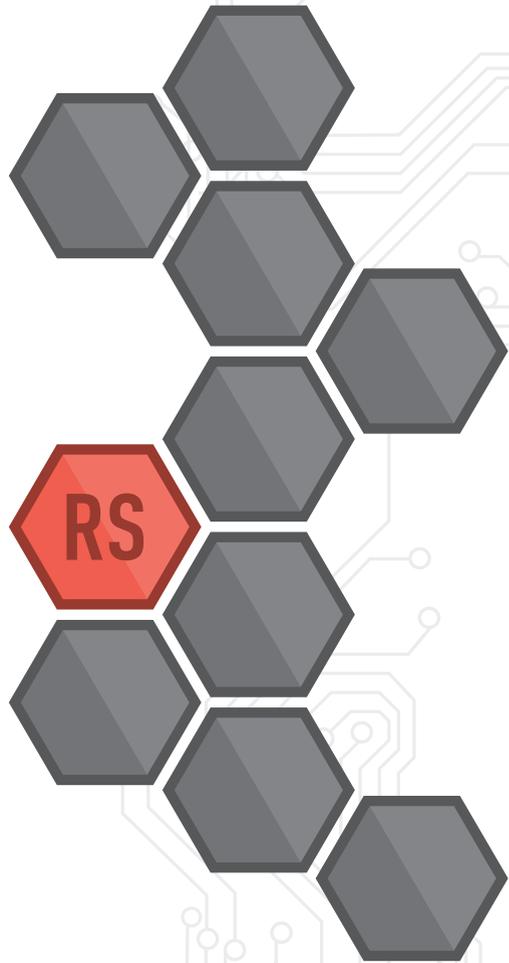


Panasonic

Resistors

Line Card Catalog



800-344-2112 | na.industrial.panasonic.com | industrial@us.panasonic.com

RS

RESISTORS

na.industrial.panasonic.com/products/resistors-inductors/resistors

Surface Mount Resistors

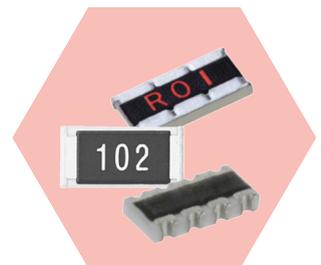
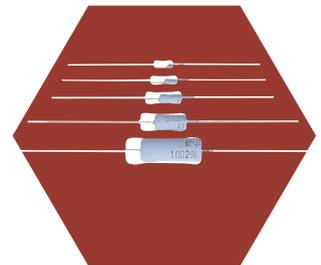
Power Resistors & Thermistors

Fuse Resistors

Axial Leaded Resistors

ESD Suppressors

Resistor Arrays & Networks



| | | Series | Case Size | Power Rating (W) | Resistance Range (Ω) | Resistance Tolerance (%) | T.C.R. (ppm/dC) | LxWxT Dimensions (mm) | Qty. 7" Reel (pcs.) | Features | |
|-------------------------|---------------------------|-----------|-----------|------------------|-------------------------------|--------------------------|------------------|-----------------------|-------------------------|---|--|
| Surface Mount Resistors | Thick Film Chip | ERJ-XGNJ | 01005 | 1/32 W | 10 - 1 M | ± 5 | ± 200 | 0.40 x 0.20 x 0.13 | 20,000 | <ul style="list-style-type: none"> • Small size and lightweight • High reliability using metal glaze thick film resistive element and three layers of electrodes • Compatible with automatic placement of bulk taping and bulk case packaging • Reflow and flow solderability • Meets ISO-9001 & QS-9000 standards • Low ohmic tolerance: ERJ-3E; 6E; 8E; 14, 12 series: $\pm 1\%$ • Halogen Free • NOTE: Chip resistor 5% tolerance | |
| | | ERJ-XGNF | 01005 | 1/32 W | 10 - 1 M | ± 1 | ± 200 | | 20,000 | | |
| | | ERJ-1GNJ | 0201 | 1/20 W | 1.0 - 1 M | ± 5 | ± 200 | 0.60 x 0.3 x 0.23 | 15,000 | | |
| | | ERJ-1GNF | 0201 | 1/20 W | 10 - 1 M | ± 1 | ± 200 | | 15,000 | | |
| | | ERJ-1RHD | 0201 | 1/20 W | 1 K to 1 M | ± 0.5 | ± 50 | 1.0 x 0.5 x 0.35 | 15,000 | | |
| | | ERJ-2GEJ | 0402 | 1/16 W | 1.0 - 2.2 M | ± 5 | ± 200 | | 10,000 | | |
| | | ERJ-2RKF | 0402 | 1/16 W | 10 - 1 M | ± 1 | ± 100 | 1.0 x 0.5 x 0.35 | 10,000 | | |
| | | ERJ-2RHD | 0402 | 1/16 W | 100 to 100 K | ± 0.5 | ± 50 | | 10,000 | | |
| | | ERJ-2RKD | 0402 | 1/16 W | 10 to 97.6 & 102 K to 1M | ± 0.5 | ± 50 | 1.6 x 0.8 x 0.45 | 10,000 | | |
| | | ERJ-3GEYJ | 0603 | 1/10 W | 1.0 - 10 M | ± 5 | ± 200 | | 5,000 | | |
| | | ERJ-3EKF | 0603 | 1/10 W | 10 - 1 M | ± 1 | ± 100 | 1.6 x 0.8 x 0.45 | 5,000 | | |
| | | ERJ-3RBD | 0603 | 1/8 W | 100 to 100 K | ± 0.5 | ± 50 | | 5,000 | | |
| | | ERJ-3RED | 0603 | 1/8 W | 10 to 97.6 & 102 K to 1M | ± 0.5 | ± 100 | 2.0 x 1.25 x 0.6 | 5,000 | | |
| | | ERJ-6GEYJ | zz0805 | 1/8 W | 1.0 - 10 M | ± 5 | ± 200 | | 5,000 | | |
| | | ERJ-6ENF | 0805 | 1/8 W | 10 - 2.2 M | ± 1 | ± 100 | 2.0 x 1.25 x 0.6 | 5,000 | | |
| | | ERJ-6RBD | 0805 | 1/8 W | 100 to 100 K | ± 0.5 | ± 50 | | 5,000 | | |
| | | ERJ-6RED | 0805 | 1/8 W | 10 to 97.6 and 102 K to 1M | ± 0.5 | ± 100 | 3.2 x 1.6 x 0.6 | 5,000 | | |
| | | ERJ-8GEYJ | 1206 | 1/4 W | 1.0 - 10 M | ± 5 | ± 200 | | 5,000 | | |
| | ERJ-8ENF | 1206 | 1/4 W | 10 - 2.2 M | ± 1 | ± 100 | 3.2 x 2.5 x 0.6 | 5,000 | | | |
| | ERJ-14YJ | 1210 | 1/4 W | 1.0 - 10 M | ± 5 | ± 200 | | 5,000 | | | |
| | ERJ-14NF | 1210 | 1/4 W | 10 - 1 M | ± 1 | ± 100 | 3.2 x 2.5 x 0.6 | 5,000 | | | |
| | ERJ-12YJ | 1812 | 1/2 W | 1.0 - 10 M | ± 5 | ± 200 | | 5,000 | | | |
| | ERJ-12NF | 1812 | 1/2 W | 10 - 1 M | ± 1 | ± 100 | 4.5 x 3.2 x 0.6 | 5,000 | Res. Range (Ω) | T.C.R. (ppm/dC) | |
| | ERJ-12ZYJ | 2010 | 1/2 W | 1.0 - 10 M | ± 5 | ± 200 | 5,000 | | | | |
| | ERJ-12SF | 2010 | 1/2 W | 10 - 1 M | ± 1 | ± 100 | 5.0 x 2.5 x 0.6 | 5,000 | <10 | -100--+600 | |
| | ERJ-1TYJ | 2512 | 1 W | 1.0 - 1 M | ± 5 | ± 200 | 6.4 x 3.2 x 0.6 | 4,000 | 10 - 1 M | * 200 | |
| | ERJ-1TNF | 2512 | 1 W | 10 - 1 M | ± 1 | ± 100 | | 4,000 | >1M | -400--+150 | |
| | Low Ohmic Thick Film Chip | ERJ-2BS | 0402 | 1/8 W | 0.1 - 0.2 | $\pm 1, \pm 5$ | ± 300 | 1.0 x 0.5 x 0.35 | 10,000 | <ul style="list-style-type: none"> • Small size and lightweight • High reliability using metal glaze thick film resistive elements and three layers of electrodes • Compatible with automatic placement of bulk taping and bulk case packaging • Reflow and flow solderability • Meets ISO-9001 & QS-9000 standards • Low resistance tolerance: ERJ-2R; 3R; 4R Series; $\pm 1\%, \pm 5\%$ • Halogen Free | |
| ERJ-2BQ | | 0402 | 1/8 W | 0.22 - 1.0 | $\pm 1, \pm 5$ | ± 250 | 10,000 | | | | |
| ERJ-3RS | | 0603 | 1/10 W | 0.1 - 0.2 | $\pm 1, \pm 2, \pm 5$ | ± 250 | 1.6 x 0.8 x 0.45 | 5,000 | | | |
| ERJ-3RQ | | 0603 | 1/10 W | 0.22 - 9.1 | $\pm 1, \pm 2, \pm 5$ | $\pm 200, \pm 250$ | | 5,000 | | | |
| ERJ-3BS | | 0603 | 1/4 W | 0.1 - 0.2 | $\pm 1, \pm 2, \pm 5$ | ± 300 | 1.6 x 0.8 x 0.45 | 5,000 | | | |
| ERJ-3BQ | | 0603 | 1/4 W | 0.22 - 0.91 | $\pm 1, \pm 2, \pm 5$ | $\pm 200, \pm 300$ | | 5,000 | | | |
| ERJ-6RS | | 0805 | 1/8 W | 0.1 - 0.2 | $\pm 1, \pm 2, \pm 5$ | ± 250 | 2.0 x 1.25 x 0.6 | 5,000 | | | |
| ERJ-6RQ | | 0805 | 1/8 W | 0.22 - 0.91 | $\pm 1, \pm 2, \pm 5$ | $\pm 200, \pm 250$ | | 5,000 | | | |
| ERJ-6BS | | 0805 | 1/3 W | 0.1 - 0.2 | $\pm 1, \pm 2, \pm 5$ | ± 250 | 2.0 x 1.25 x 0.6 | 5,000 | | | |
| ERJ-6BQ | | 0805 | 1/3 W | 0.22 - 0.91 | $\pm 1, \pm 2, \pm 5$ | $\pm 200, \pm 250$ | | 5,000 | | | |
| ERJ-8RS | | 1206 | 1/4 W | 0.1 - 0.2 | $\pm 1, \pm 2, \pm 5$ | ± 250 | 3.2 x 1.6 x 0.6 | 5,000 | | | |
| ERJ-8RQ | | 1206 | 1/4 W | 0.22 - 0.91 | $\pm 1, \pm 2, \pm 5$ | $\pm 200, \pm 250$ | | 5,000 | | | |
| ERJ-8BS | | 1206 | 1/2 W | 0.1 - 0.2 | $\pm 1, \pm 2, \pm 5$ | ± 200 | 3.2 x 1.6 x 0.6 | 5,000 | | | |
| ERJ-8BQ | | 1206 | 1/2 W | 0.22 - 0.91 | $\pm 1, \pm 2, \pm 5$ | $\pm 100, \pm 200$ | | 5,000 | | | |
| ERJ-14RS | | 1210 | 1/4 W | 0.1 - 0.2 | $\pm 1, \pm 2, \pm 5$ | ± 200 | 3.2 x 2.5 x 0.6 | 5,000 | | | |
| ERJ-14RQ | | 1210 | 1/4 W | 0.22 - 0.91 | $\pm 1, \pm 2, \pm 5$ | $\pm 100, \pm 200$ | | 5,000 | | | |
| ERJ-14BS | | 1210 | 1/2 W | 0.1 - 0.2 | $\pm 1, \pm 2, \pm 5$ | ± 200 | 3.2 x 2.5 x 0.6 | 5,000 | | | |
| ERJ-14BQ | | 1210 | 1/2 W | 0.22 - 0.91 | $\pm 1, \pm 2, \pm 5$ | $\pm 100, \pm 200$ | | 5,000 | | | |

| | | Series | Case Size | Power Rating (W) | Resistance Range (Ω) | Resistance Tolerance (%) | T.C.R. (ppm/dC) | LxWxT Dimensions (mm) | Qty. 7" Reel (pcs.) | Features |
|-------------------------|-----------------------------------|----------|-----------|------------------|----------------------|--------------------------|-----------------|-----------------------|---------------------|---------------------|
| Surface Mount Resistors | Low Ohm/Low Ohmic Thick Film Chip | ERJ-12RS | 1812 | 1/2 W | 0.1 - 0.2 | ± 1, ± 2, ± 5 | ±200 | 4.5 x 3.2 x 0.6 | 5,000 | • See previous page |
| | | ERJ-12RQ | 1812 | 1/2 W | 0.22 - 0.91 | ± 1, ± 2, ± 5 | ±100, ±200 | | 5,000 | |
| | | ERJ-12ZS | 2010 | 1/2 W | 0.1 - 0.2 | ± 1, ± 2, ± 5 | ±200 | 5.0 x 2.5 x 0.6 | 5,000 | |
| | | ERJ-12ZQ | 2010 | 1/2 W | 0.22 - 0.91 | ± 1, ± 2, ± 5 | ±100, ±200 | | 5,000 | |
| | | ERJ-1TRS | 2512 | 1 W | 0.1 - 0.2 | ± 1, ± 2, ± 5 | ±200 | 6.4 x 3.2 x 0.6 | 4,000 | |
| | | ERJ-1TRQ | 2512 | 1 W | 0.22 - 0.91 | ± 1, ± 2, ± 5 | ±100, ±200 | | | |

| | | Series | Case Size | Power Rating (W) | Resistance Range | Resistance Tolerance (%) | T.C.R. (ppm/dC) | LxWxT Dimensions (mm) | Qty. 7" Reel | Features | | |
|-------------------------|--------------------------------------|----------------|-----------|------------------|----------------------|---------------------------|--|---------------------------|------------------|---|---|--|
| Surface Mount Resistors | Ultra Low Ohmic Thick Film Resistors | ERJ-2LW | 0402 | 1/5 W | 10 m | ± 1, +2, +5 | 0 to 500 | 1.0 x 0.5 x 0.4 | 10000 | <ul style="list-style-type: none"> • Small size and lightweight • High reliability using metal glaze thick film resistive elements and three layers of electrodes • Compatible with automatic placement of bulk taping and bulk case packaging • Reflow and flow solderability • Meets ISO-9001 & QS-9000 standards • Low ohmic values for ERJ-L14; L12; L1W series: 47 mΩ-100 mΩ • Halogen Free | | |
| | | ERJ-2BW | 0402 | 1/4 W | 0.047 - 0.2 | ± 2, ± 5 | ±300 | 1.0 x 0.5 x 0.35 | 10,000 | | | |
| | | ERJ-3LW | 0402 | 1/4 W | 5 m - 10 m | ± 1, ± 2, ± 5 | 5 m: 0 to 700 10 m: 0 to 300 | 1.6 x 0.8 x 0.55 | 5000 | | | |
| | | ERJ-3BW | 0603 | 1/4 W | 20 m - 100 m | ± 1, ± 2, ± 5 | ±300 | 1.6 x 0.8 x 0.55 | 5,000 | | | |
| | | ERJ-6BW | 0805 | 1/3 W | 10 m - 50 m | ± 1, ± 2, ± 5 | ±200, ±300 | 2.0 x 1.25 x 0.65 | 5,000 | | | |
| | | ERJ-8BW | 1206 | 1 W | 0.01 - 0.1 | ± 1, ± 2, ± 5 | ±100, ±150, ±200 | 32 x 1.6 x 0.6 | 5,000 | | | |
| | | ERJ-8CW | 1206 | 1 W | 10 m - 50 m | ± 1, ± 2, ± 5 | +50 | 3.2 x 1.6 x 0.65 | 5000 | | | |
| | | ERJ-L03 | 0603 | 1/5 W | 47 - 100 milli. | ± 1, ± 5 | ± 200 | 1.6 x 0.8 x 0.45 | 5,000 | | | |
| | | ERJ-L06 | 0805 | 1/4 W | 47 - 100 milli. | ± 1, ± 5 | ± 100 | 2.0 x 1.25 x 0.6 | 5,000 | | | |
| | | ERJ-L08 | 1206 | 1/3 W | 47 - 100 milli. | ± 1, ± 5 | ± 100 | 3.2 x 1.6 x 0.6 | 5,000 | | | |
| | | ERJ-L14 | 1210 | 1/3 W | 20 - 100 milli. | ± 1, ± 5 | R < 47 milli: ± 300 R ≥ 47 milli: ± 100 | 3.2 x 2.5 x 0.6 | 5,000 | | | |
| | | ERJ-L12 | 1812 | 1/2 W | 20 - 100 milli. | ± 1, ± 5 | | 4.5 x 3.2 x 0.6 | 5,000 | | | |
| | | ERJ-L1D | 2010 | 1/2 W | 40 - 100 milli. | ± 1, ± 5 | | 5.0 x 2.5 x 0.6 | 5,000 | | | |
| | | ERJ-L1W | 2512 | 1 W | 40 - 100 milli. | ± 5 | | 6.4 x 3.2 x 1.1 | 3,000 | | | |
| | | ERJ-M1WT | 2512 | 1 W | 3, 4 m | ± 1, ± 5 | ± 350 | 6.4 x 3.2 x 0.8 | 3,000 | | <ul style="list-style-type: none"> • Metal plate is used as resistance element • Reflow and flow solderability • ERJ-M1WT: For heat dissipation • ±1% tolerance for 1-2 mΩ available upon request • Halogen Free | |
| | | ERJ-M1WT | 2512 | 1 W | 5, 6, 10, 15, 20 m | ± 1, ± 5 | ± 100 | 6.4 x 3.2 x 0.8 | 3,000 | | | |
| | | ERJ-M1WS | 2512 | 1 W | 1, 1.5 m | ± 1, ± 5 | 350 ± 100 | 6.4 x 3.2 x 0.8 | 3,000 | | | |
| | | ERJ-M1WS | 2512 | 1 W | 2, 3, 4 m | ± 1, ± 5 | 100 ± 50 | 6.4 x 3.2 x 0.8 | 3,000 | | | |
| | | ERJ-MS4S | 2512 | 3 W | 1, 2, 3, 4 m | ± 1 | ± 75 | 6.4 x 3.2 x 1.2 | 2000 | | | |
| | | ERJ-MS4H | 2512 | 3 W | 5, 6 m | ± 1 | ± 75 | 6.4 x 3.2 x 1.2 | 2000 | | | |
| | | ERJ-MS4H | 2512 | 2 W | 7, 8, 9, 10 m | ± 1 | ± 75 | 6.4 x 3.2 x 1.2 | 2000 | | | |
| | | ERJ-MS6S | 2526 | 5 W | 0.5, 1, 2 m | ± 1 | ± 75 | 6.4 x 6.8 x 1.2 | 1000 | | | |
| | | Thin Film Chip | ERA-1A | 0201 | 1/20 W | 100 to 10 K | ±01, ±0.25 | ± 25 | 0.6 x 0.3 x 0.23 | | 15000z | <ul style="list-style-type: none"> • Small size and lightweight • High reliability • Low T.C.R. & current noise • High operating temperature capability: -55 to +155°C • Excellent non-linearity • Halogen Free • Reflow & flow solderability • Meets ISO-9001 standards |
| | | | ERA-2A | 0402 | 1/16 W | 10 - 100K | ±0.1, ±0.25, ±0.5 | ± 10, ± 15 ± 25, ± 100 | 1.0 x 0.5 x 0.35 | | 10,000 | |
| ERA-3A | 0603 | | 1/10 W | 10 - 330 K | ± 0.05, ± 0.1, ± 0.5 | ± 10, ± 15, ± 25, ± 50 | 1.6 x .80 x 0.45 | 5,000 | | | | |
| ERA-6A | 0805 | | 1/8 W | 10 - 1 M | ± 0.05, ± 0.1, ± 0.5 | ± 10, ± 15, ± 25, ± 50 | 2.0 x 1.25 x 0.5 | 5,000 | | | | |
| ERA-8A | 1206 | | 1/4 W | 10 - 1 M | ± 0.1, ± 0.5 | ± 10, ± 15, ± 25, ± 50 | 3.2 x 1.6 x 0.6 | 5,000 | | | | |

| | | Series | Case Size | Power Rating (W) | Resistance Value | Resistance Tolerance (%) | T.C.R (ppm/C) | LxWxT Dimensions (mm) | Qty 7" Reel | Features |
|----------------------------|----------------------------|---------|-----------|------------------|------------------|--|------------------------------------|-----------------------|--|--|
| Surface Mount Resistors | Anti-Surge Thick Film Chip | ERJ-P03 | 0603 | 1/5 W | 10 to 1M | ±0.5, ±1 | ±150, ±200 | 1.60 x 0.8 x 0.45 | 5,000 | <ul style="list-style-type: none"> • Anti-Surge characteristics superior to standard metal film resistors • High reliability • High Power • Suitable for both flow and re-flow soldering |
| | | | | | 1 to 1M | +5 | R>10 Ω: ±200 R<10Ω: -150 to 400 | | | |
| | | ERJ-PA3 | 0603 | 1/4 W | 10 to 1M | ±0.5, ±1 | ±100 | 1.6 x 0.8 x 0.45 | | |
| | | | | | 1 to 1.5 M | +5 | ±200 | | | |
| | | ERJ-P06 | 0805 | 1/2 W | 1 to 1M | ±0.5, ±1 | R≥30 Ω: ±100 R<30Ω: ±300 | 2.0 x 1.25 x 0.60 | | |
| | | | | | 1 to 3.3M | +5 | R≥30 Ω: ±200 R<30Ω: ±300 | | | |
| | ERJ-P08 | 1206 | 2/3 W | 10 to 1M | ±0.5, ±1 | ±100 | 3.2 x 1.6 x 0.60 | | | |
| | | | | 1 to 10 M | +5 | R≥10 Ω: ±200 R<10Ω: -100 to +600 | | | | |
| | ERJ-P14 | 1210 | 1/2 W | 10 to 1M | ±0.5, ±1 | ±100 | 3.2 x 2.5 x 0.60 | | | |
| | | | | 1 to 1M | +5 | R≥10 Ω: ±200 R<10Ω: -100 to +600 | | | | |
| | ERJ-P6W | 0805 | 1/2 W | 10 to 1M | ±1 | ±200 | 2.0 x 1.25 x 0.65 | | | |
| | | | | 1 to 1M | +5 | R < 10 : -100 to +600 10 < R : +-200 | | | | |
| Anti-Pulse Thick Film Chip | ERJ-T06 | 0805 | 1/4 W | 1 to 1M | +5 | R>33 Ω: ±200 R<30Ω: ±300 R<10Ω: -100 to +600 | 2.0 x 1.25 x 0.60 | 5,000 | <ul style="list-style-type: none"> • Pulse Tolerant • High Reliability • High Power | |
| | ERJ-T08 | 1206 | 1/3 W | 1 to 1M | +5 | R≥10 Ω: ±200 R<10Ω: -100 to +600 | 3.2 x 1.6 x 0.60 | | | |
| | ERJ-T14 | 1210 | 1/2 W | 1 to 1M | +5 | R≥10 Ω: ±200 R<10Ω: -100 to +600 | 3.2 x 2.5 x 0.60 | | | |

| | | Series | Case Size | Power Rating (W) | Resistance Value | Resistance Tolerance (%) | T.C.R (ppm/C) | LxWxT Dimensions (mm) | Qty. 7" Reel | Features |
|-------------------------|---------------------------------|--------------------|------------|------------------|------------------|--------------------------|---------------|---|--------------|---|
| Surface Mount Resistors | Anti-Sulfurated Thick Film Chip | ERJ-U01 | 0201 | 1/20 W | 10 to 1M | ±1 | ±200 | 0.6 x 0.3 x 0.23 | 15,000 | <ul style="list-style-type: none"> • Sulfur resistance • High reliability • Suitable for flow and re-flow soldering • ERJ-S: Au-based inner electrode • ERJ-U: Ag-Pd-based inner electrode |
| | | | | | 1 to 1M | ±5 | | | | |
| | | ERJ-S02 ERJ-U02 | 0402 | 0.1 W | 10 to 1M | ±1 | ±200 | 1.0 x 0.50 x 0.35 | 10,000 | |
| | | | | | 1 to 3.3M | ±5 | | | | |
| | | ERJ-S03 ERJ-U03 | 0603 | 0.1 W | 10 to 1M | ±1 | ±100 | 1.60 x 0.8 x 0.45 | 5,000 | |
| | | | | | 1 to 10M | ±5 | ±200 | | | |
| | | ERJ-S06 ERJ-U06 | 0805 | 0.125 W | 10 to 1M | ±1 | ±100 | 2.0 x 1.25 x 0.60 | 5,000 | |
| | | | | | 1 to 10M | ±5 | ±200 | | | |
| | | ERJ-S08 ERJ-U08 | 1206 | 0.25 W | 10 to 1M | ±1 | ±100 | 3.20 x 1.60 x 0.60 | 5,000 | |
| | | | | | 1 to 10M | ±5 | ±200 | | | |
| | | ERJ-S14 ERJ-U14 | 1210 | 0.5 W | 10 to 1M | ±1 | ±100 | 3.20 x 2.50 x 0.60 | 5,000 | |
| | | | | | 1 to 10M | ±5 | ±200 | | | |
| | | ERJ-S12 ERJ-U12 | 1812 | 0.75 W | 10 to 1M | ±1 | ±100 | 4.50 x 3.20 x 0.60 | 5,000 | |
| | | | | | 1 to 10M | ±5 | ±200 | | | |
| | | ERJ-S10 ERJ-U10 | 2010 | 0.75 W | 10 to 1M | ±1 | ±100 | 5.0 x 2.50 x 0.60 | 5,000 | |
| | | | | | 1 to 10zM | ±5 | ±200 | | | |
| ERJ-S1T ERJ-U1T | 2512 | 1 W | 10 to 1M | ±1 | ±100 | 6.40 x 3.20 x 0.60 | 40,000 | | | |
| | | | 1 to 1M | ±5 | ±200 | | | | | |
| ERJ-U6S | 0805 | 0.25 | 0.1 to 0.2 | ±1, ±2, ±5 | ±150 | 2.0 x 1.25 x 0.55 | 5000 | | | |
| ERJ-U6Q | 0805 | 0.25 | 0.22 to 1 | ±1, ±2, ±5 | ±150 | 2.0 x 1.25 x 0.55 | 5000 | | | |
| EXB-U24 | 0402 | 1/16 W | 10 to 1M | ±5 | ±200 | 1.0 x 1.0 x 0.35 | 10,000 | | | |
| ERJ-C1 | 1020 | 2 W | 10 m to 1 | ±1 ±5 | Refer to Spec | 2.5 x 5.0 x 0.55 | 5000 | <ul style="list-style-type: none"> • Array solution for high placement efficiency • Ag-Pb-based inner electrode | | |
| EXB-U28 | 0402 | 1/16 W | 10 to 1M | ±5 | ±200 | 2.0 x 1.0 x 0.35 | 10,000 | <ul style="list-style-type: none"> • U24: 4 terminals, 2 resistors • U28: 8 terminals, 4 resistors | | |

| | | Series | Case Size | Power Rating (W) | Resistance Range Ω | Resistance Tolerance (%) | T.C.R. (ppm/dC) | LxWxT Dimensions (mm) | Quantity 7" Reel | Features |
|-------------------------------|--------------------------|----------|-----------|------------------------------------|--|---|---|-----------------------|------------------|---|
| Power Resistors & Thermistors | High Power Wide Terminal | ERJ-A1 | 2512 | 1.33 W | 10 m - 10 k | $\pm 1, \pm 2, \pm 5$ | Refer to Spec | 6.4 x 3.2 x .55 | 4,000 | <ul style="list-style-type: none"> • High solder joint reliability • Excellent heat dissipation • Halogen Free |
| | | ERJ-B1 | 2010 | 1 W, (2 W R < 10 Ω) | 10 m - 10 k | $\pm 1, \pm 2, \pm 5$ | | 5.0 x 2.5 x .55 | 5,000 | |
| | | ERJ-B2 | 1206 | 0.75 W, (1 W R < 10 Ω) | 5 m - 1 M | $\pm 1, \pm 2, \pm 5$ | Refer to Spec | 3.2 x 1.6 x 0.65 | 5,000 | |
| | | ERJ-B3 | 0805 | 0.33 W, (0.5 W R < 1 Ω) | 20 m - 10 M | $\pm 1, \pm 2, \pm 5$ | Refer to Spec | 2.0 x 1.25 x 0.5 | 5,000 | |
| | Chip Attenuator | EXB-24AT | 0404 | 1 / 25 W Package | Attenuation Range 1 - 5 dB 6 - 10 dB | Attenuation Tolerance ± 0.3 dB ± 0.5 dB | Characteristic Impedance 50 Ω | 1.0 x 1.0 x 0.35 | 10,000 | <ul style="list-style-type: none"> • Space saving design using unbalanced pie-type attenuator |

EIA Standard Resistance Values E-96 Tolerance *1% | E-24 Tolerance *5%, 0.5%, 0.1%

| | | Series | Case Size | Rated Functioning Temperature | Internal R at 25C (Max) | Rated Voaltage | Interrupting Rating at Rated Voltage | Rated Current | Features | |
|----------------|-----|------------|----------------|-------------------------------|-------------------------------|---|--------------------------------------|------------------------------|----------------------------------|---|
| Fuse Resistors | SMD | Micro Chip | ERB-RD | 0402 | -40°C to +125°C | 37m - 820 m Ω | 32VDC | 35A | 0.25A - 3A | <ul style="list-style-type: none"> • Fast acting • Small size |
| | | | ERB-RE | 0603 | -40°C to +125°C | 19m - 330 m Ω | 32VDC | 50A | 0.5A - 5A | |
| | | | ERB-RG | 1206 | -40°C to +125°C | 35m - 560 m Ω | 32VDC, 63VDC | 50A | 0.5A - 4A | |
| | | Leaded | Thermal Cutoff | EYP | Thin, Axial Lead, Radial Lead | 92°C, 98°C, 102°C, 115°C, 134°C, 139°C, 145°C | 250VAC, 50VDC, 32VDC | 0.5A, 1.5A, 2A, 3A, 3.5A, 4A | 55C - 125C (Vary by part number) | 135C, 200C |

| | | Series | Power Rating (W) | Resistance Range | Resistance Tolerance | Dielectric Withstanding Voltage (VAC) | T.C.R. (ppm/dC) | L x D |
|------------------------|------------------------------|----------------------|------------------|------------------|----------------------|---|-----------------|------------|
| Axial Leaded Resistors | Metal (Oxide) Film Resistors | ERG(X)12S | 0.5 | 1 to 22 K | ± 2 | 350 | ± 350 | 6.35 x 2.3 |
| | | | | 0.2 to 47 K | ± 5 | | | |
| | | ERG(X)1S ERG(X)1F | 1 | 1 to 68 K | ± 2 | 350 | ± 350 | 9.0 x 2.8 |
| | | | | 0.2 to 100 K | ± 5 | | | |
| | | ERG(X)2S ERG(X)2F | 2 | 1 to 100 K | ± 2 | 600 | ± 350 | 12.0 x 4.0 |
| | | | | 0.22 to 100 K | ± 5 | | | |
| | ERG(X)3S ERG(X)3F | 3 | 1 to 100 K | ± 2 | 1000 | ± 300 | 15.0 x 5.5 | |
| | | | 0.22 to 100 K | ± 5 | | | | |
| | ERG(X)5S ERG(X)5F | 5 | 1 to 100 K | ± 2 | 1000 | ± 200 | 24.0 x 8.0 | |
| | | | 0.33 to 100 K | ± 5 | | | | |
| | High Power | ERG-12D | 0.5 | 51 K to 240 K | $\pm 2, \pm 5$ | 500 | ± 200 | 6.35 x 2.3 |
| | | ERG-1D | 1 | 110 K to 330 K | $\pm 2, \pm 5$ | 500 | ± 200 | 9.0 x 2.8 |
| | | ERG-2D | 2 | 110 K to 510 K | $\pm 2, \pm 5$ | 700 | ± 200 | 12.0 x 4.0 |
| ERG-3D | | 3 | 110 K to 750 K | $\pm 2, \pm 5$ | 700 | ± 200 | 15.0 x 5.5 | |
| Low Ohmic | ERX-12L | 0.5 | 22 to 82 m | $\pm 2, \pm 5$ | 350 | 22 to 39 m: +-1000 47 to 82 m: +-500 | 6.35 x 2.3 | |
| | ERX-1L | 1 | 22 to 82 m | $\pm 2, \pm 5$ | 350 | | 9.0 x 2.8 | |
| | ERX-2L | 2 | 22 to 82 m | $\pm 2, \pm 5$ | 600 | | 12.0 x 4.0 | |

| | Series | Case Size | Capacitance | LxWxT (mm) Dimensions | Qty. 7" Reel | Features |
|-----------------|----------|-----------|--------------------------|--------------------------|-----------------|--|
| ESD Suppressors | EZA-EG1A | 0201 | C = 0.04 pF | 0.6 x 0.3 x 0.23 | 15,000 | <ul style="list-style-type: none"> • Good ESD Suppression • Good ESD Withstanding • Low Capacitance |
| | EZA-EG2A | 0402 | C = 0.10 pF | 1.0 x 0.5 x 0.38 | 10,000 | |
| | EZA-EG3A | 0603 | C = 0.05 pF | 1.6 x .80 x 0.5 | 5,000 | |
| | EZA-EGCA | 0805 | C = 0.25 pF (4 Per Pkg.) | 2.6 x 1.85 x 0.5 | 5,000 | |

| | Series | Case Size | Power Rating (W) | Resistance Range | Resistance Tolerance (%) | T.C.R. (ppm/°C) | LxWxT Dimensions (mm) | Qty. 7" Reel | Features |
|----------------------------|-----------------------|-----------------------|-------------------|------------------|--------------------------|--|-----------------------|------------------|---|
| Resistor Arrays & Networks | ERA-38V | 0603 x 4 Convex Term | 1/16 W Element | 100K-220 K | 0.5 | ± 25 | 3.2 x 1.6 x 0.5 | 5,000 | <ul style="list-style-type: none"> • High density of resistors in single array chip • Improved placement efficiency (2 to 4 times greater) compared to flat chip type resistors |
| | | | | 1K-100 K | 0.1, 0.25 | | | | |
| | EXB-14V | 0201 x 2 Convex Term | 1/32 W | 10 - 1 M | ± 5 | ± 200 x | 0.8 x 0.6 x 0.35 | 10,000 | |
| | EXB-18V | 0201 x 4 Flat Term | 1/32 W | 10 - 1 M | ± 5 | 10 ⁻⁶ /dC | 1.4 x 0.6 x 0.35 | | |
| | EXB-N8V | 0402 x 4 Concave Term | 1/32 W | 1 - 1 M | ± 5 | 1 - 100: ± 600/-100x10 ⁻⁶ /dC | 2.0 x 1.0 x 0.45 | | |
| | EXB-24V | 0402 x 2 Convex Term | 1/16 W | 1 - 1 M | ± 5 | 10 - 1 M : ± 200 | 1.0 x 1.0 x 0.35 | | |
| | EXB-28V | 0402 x 4 Convex Term | 1/32 W | 1 - 1 M | | | 2.0 x 1.0 x 0.35 | | |
| | EXB-2HV | 0402 x 8 Convex Term | 1/16 W Element | 1 - 1 M | ± 5 | 10 - 1 M : ± 200 | 3.8 x 1.6 x 0.45 | | |
| | EXB-34V | 0603 x 2 Convex Term | 1/16 W | 1 - 1 M | | | 1.6 x 1.6 x 0.50 | | |
| | EXB-38V | 0603 x 4 Convex Term | 1/16 W | 1 - 1 M | | | 3.2 x 1.6 x 0.50 | | |
| | EXB-V4V | 0603 x 2 Concave Term | 1/16 W | 1 - 1 M | ± 1 upon request | 10 > : -100 - + 600 | 1.6 x 1.6 x 0.60 | | |
| | EXB-V8V | 0603 x 4 Concave Term | 1/16 W | 1 - 1 M | | | 3.2 x 1.6 x 0.60 | | |
| | EXB-S8V | 0805 x 4 Concave Term | 1/10 W Element | 10 - 1 M | | | 5.08 x 2.2 x 0.7 | 2,500 | |
| | Chip Resistor Network | EXB-D10C | 1206 Concave Term | 1/20 W Element | 47 - 1 M | ± 5 | ± 200 | 3.2 x 1.6 x 0.55 | |
| EXB-Q16 | | 1506 Concave Term | 1/40 W | 100 - 470 K | 3.8 x 1.6 x 0.45 | | | | |
| EXB-E10C | | 1608 Concave Term | 1/16 W Element | 47 - 1 M | 4.0 x 2.1 x 0.55 | | | 4,000 | |
| EXB-A10P | | 2512 Concave Term | | | 6.4 x 3.1 x 0.55 | | | | |

Over 65,000 Part Numbers Are Just a Click Away

Visit the NEW Panasonic Website Today at:
na.industrial.panasonic.com



Quickly and Easily Search Product Details

Discover The Latest Panasonic Products



Easily Find Inventory By Part Number

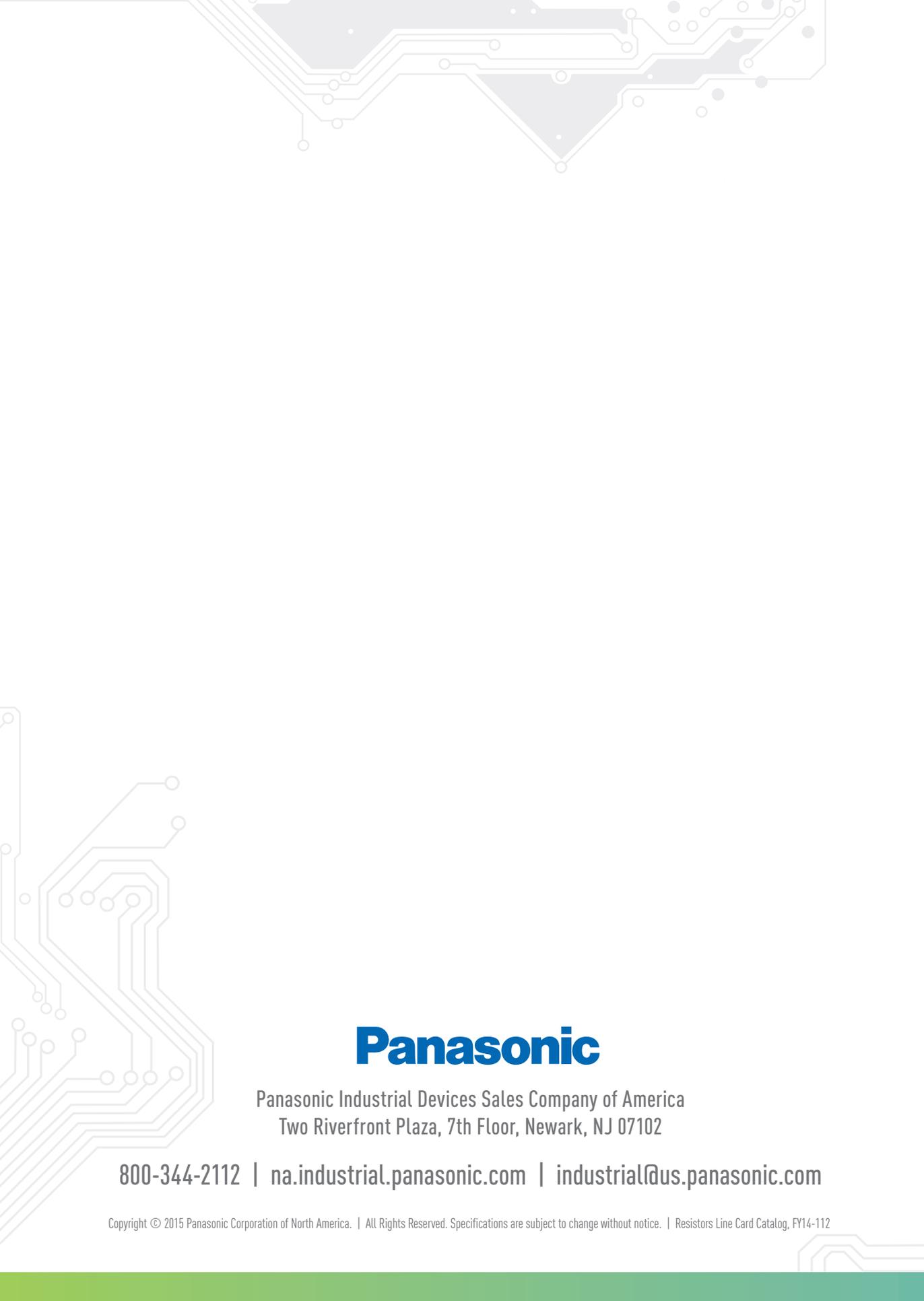
Locate Distributors & Get Support



Panasonic



industrial@us.panasonic.com | 1-800-344-2112



Panasonic

Panasonic Industrial Devices Sales Company of America
Two Riverfront Plaza, 7th Floor, Newark, NJ 07102

800-344-2112 | na.industrial.panasonic.com | industrial@us.panasonic.com