Vishay Dale



Thick Film, Dual-in-Line Resistor Networks



FEATURES

- 14,16 or 20 terminal package .
- Isolated, bussed or TTL-terminator circuits Molded case construction Thick film resistive elements
- •
- Reflow solderable
- Compatible with automatic surface mounting equipment ٠



- COMPLIANT
- Reduces total assembly costs
 For wave flow soldering contact factory
 Lead (Pb)-free version is RoHS compliant

| STAND | STANDARD ELECTRICAL SPECIFICATIONS | | | | | | | | | |
|-------|------------------------------------|-----------------------|--|----------------------|----------------|-----------------------------------|--|-------------------------------|---------------------|----------|
| | ELEMENT | PACKAG | PACKAGE POWER RATING <i>P</i> 70 °C W | | CIRCUIT | | TEMPERATURE COEFFICIENT ¹⁾ | TOL. | RESISTANCE RANGE | E-SERIES |
| MODEL | <i>Р</i> _{70 °} с W | 14 | 16 | 20 | | $\underset{V\cong}{VOLTAGE MAX}.$ | ppm/°C | 70 | Ω | |
| SOMC | 0.08 0.16 0.08 | 1.05 1.125 1.05 | 1.20 1.28 1.20 | 1.52 1.60 1.52 | 01 03 05 | 50 | 100 | 1, 2, 5 1, 2, 5 1, 2, 5 | 10R - 1M | 24 |

Notes

Jumper: Zero-Ohm-Resistor on request (100 m Ω)

• Packaging: according to EIA; see appropriate catalog or web page

| TECHNICAL SPECIFICATIONS | | | | | | |
|--------------------------|--|---|---|--|--|--|
| UNIT | 01 CIRCUIT | 03 CIRCUIT | 05 CIRCUIT | | | |
| W | 0.08 | 0.16 | 0.08 | | | |
| V≅ | | 50 | | | | |
| ppm/V | | < 50 | | | | |
| V _{dc/ac} peak | | 200 | | | | |
| °C | | - 55/+ 150 | | | | |
| Ω | | > 10 ¹⁰ | | | | |
| ppm/°C | | 50 | | | | |
| - | UNIT W V≘ ppm/V V _{dc/ac} peak °C Ω | UNIT 01 CIRCUIT W 0.08 V≅ 0.08 ppm/V 0.08 Vdc/ac peak 0.02 °C 0.02 Ω 0.02 | $\begin{array}{c c c c c c c c } & 01 \ CIRCUIT & 03 \ CIRCUIT \\ \hline W & 0.08 & 0.16 \\ \hline V_{\cong} & 50 \\ \hline ppm/V & <50 \\ \hline V_{dc/ac} \ peak & 200 \\ \ ^{\circ}C & -55/+ \ 150 \\ \hline \Omega & > 10^{10} \\ \hline \end{array}$ | | | |

Note: 1.Rated voltage: \sqrt{PxR}

| GLOBAL PAR | GLOBAL PART NUMBER INFORMATION | | | | | | |
|-----------------------|---|---|------------------------------------|--|--|--|--|
| New Global Part Nu | umbering: SOMC16011K00G | DC (preferred part nu | Imbering format) | | | | |
| S | 0 M C 1 6 | 0 1 1 K | 00G | | | | |
| GLOBAL MODEL | | VALUE | TOLERANCE | PACKAGING | SPECIAL | | |
| SOMC | 14 01 = Busser 16 03 = Isolate 20 00 = Specia | d K = Thousand M = Million | J = ± 5 % | EJ = Lead (Pb)-free, Tube A = Lead (Pb)-free, Tape & Reel DC = Tin/Lead, Tube | Blank = Standard (Dash Number) (up to 3 digits) | | |
| | | | S = Special | RZ = Tin/Lead, Tape & Reel | From 1-999 as applicable | | |
| Historical Part Nun | nber example: SOMC160110 | 2G (will continue to b | be accepted) | | | | |
| SOMC | 16 | 01 | 102 | G | D02 | | |
| HISTORICAL MOD | EL PIN COUNT | SCHEMATIC | RESISTANCE VAL | UE TOLERANCE CODE | PACKAGING | | |
| New Global Part Nu | Imbering: SOMC2005500BG O M C 2 | RZ (preferred part nu | Imbering format) 0 B G | | | | |
| GLOBAL MODEL | PIN COUNT SCHEMATI | C RESISTANCE VALUE | TOLERANCE | PACKAGING | SPECIAL | | |
| SOMC | 14 05 = Dual 16 Terminator 20 | 3 digit Impedence code, followed by | | EJ = Lead (Pb)-free, Tube A = Lead (Pb)-free, Tape & Reel | Blank = Standard (Dash Number) | | |
| | 20 | Alpha modifier (see Impedence | | DC = Tin/Lead, Tube RZ = Tin/Lead, Tape & Reel | (up to 3 digits) From 1-999 as applicable | | |
| Historical Part Nun | ber example: SOMC200582 | table 0131G (will continue | to be accepted) | Tape & Reel | | | |
| SOMC | | 05 810 | | G | R61 | | |
| HISTORICAL MOD | EL PIN COUNT SCHE | EMATIC RESISTA VALUE | | | PACKAGING | | |
| * Pb containing termi | nations are not RoHS compli | ant, exemptions may a | apply | | | | |



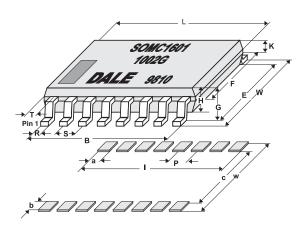
Temperature Range: - 55 °C to + 125 °C
 Power rating depends on the max, temperature at the solder point, the component placement density and the substrate material



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DIMENSIONS

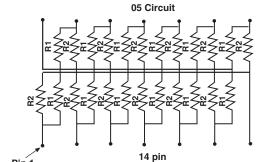


| SOLDER PAD DIMENSIONS in inches [millimeters] | | | | | | | |
|---|------|------|------|------|------|------|--|
| | а | b | с | I | р | w | |
| WAVE | 0.64 | 1.91 | 5.34 | 9.53 | 1.27 | 9.15 | |
| REFLOW | 0.64 | 1.91 | 5.34 | 9.53 | 1.27 | 9.15 | |

The dimension shown are for a 16 pin part. For parts with different pin numbers use the same pitch and add or subtract pads as required.

Note: Maximum solder reflow temperature + 255 °C

| | DIMENSIONS [in millimeters] | | | | | | | | | | |
|------------|-----------------------------|--------|--------|--------|--------|--------|--------|-------|-------|--------|------|
| pin No# | L | w | в | E | F | G | Н | K | R | s | т |
| 14 | 9.91 | 7.62 | 7.62 | 6.20 | 5.59 | 2.16 | 2.03 | 0.914 | 0.457 | 1.27 | 1.14 |
| 16 | 11.18 | 7.62 | 8.89 | 6.20 | 5.59 | 2.16 | 2.03 | 0.914 | 0.457 | 1.27 | 1.14 |
| 20 | 13.72 | 7.62 | 11.43 | 6.20 | 5.59 | 2.16 | 2.03 | 0.914 | 0.457 | 1.27 | 1.14 |
| Tol | ±0.254 | ±0.381 | ±0.254 | ±0.381 | ±0.127 | ±0.127 | ±0.127 | | | ±0.254 | |



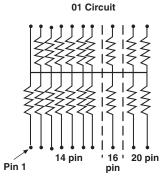
| IMPEDANCE CODES | | | | | | | |
|-----------------|---------------------------|---------------------------|------|---------------------------|---------------------------|--|--|
| CODE | R ₁ (Ω) | R₂ (Ω) | CODE | R ₁ (Ω) | R₂ (Ω) | | |
| 500B | 82 | 130 | 141A | 270 | 270 | | |
| 750B | 120 | 200 | 181A | 330 | 390 | | |
| 800C | 130 | 210 | 191A | 330 | 470 | | |
| 990A | 160 | 260 | 221B | 330 | 680 | | |
| 101C | 180 | 240 | 281B | 560 | 560 | | |
| 111C | 180 | 270 | 381B | 560 | 1.2K | | |
| 121B | 180 | 390 | 501C | 620 | 2.7K | | |
| 121C | 220 | 270 | 102A | 1.5K | 3.3K | | |
| 131A | 220 | 330 | 202B | 3K | 6.2K | | |

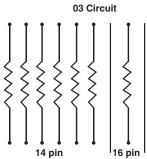
| PERFORMANCE | | | | | |
|------------------------------|--------------------|--------------|--|--|--|
| TEST | CONDITIONS OF TEST | TEST RESULTS | | | |
| Power Conditioning | MIL STD-202 | ± 0.5 % | | | |
| Load Life at 70 °C | MIL STD-202 | ± 0.5 % | | | |
| Short Time Overload | MIL STD-202 | ± 0.25 % | | | |
| Thermal Shock | MIL STD-202 | ± 0.5 % | | | |
| Moisure Resistance | MIL STD-202 | ± 0.5 % | | | |
| Resistance to Soldering Heat | MIL STD-202 | ± 0.25 % | | | |
| Low Temperature Operation | MIL STD-202 | ± 0.25 % | | | |
| Vibration | MIL STD-202 | ± 0.25 % | | | |
| Shock | MIL STD-202 | ± 0.25 % | | | |
| Terminal Strength | MIL STD-202 | ± 0.25 % | | | |

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For technical questions, contact: ff2aresistors@vishay.com

CIRCUIT SCHEMATICS





ξ

20 pin 16 pin

Pin 1



Vishay

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