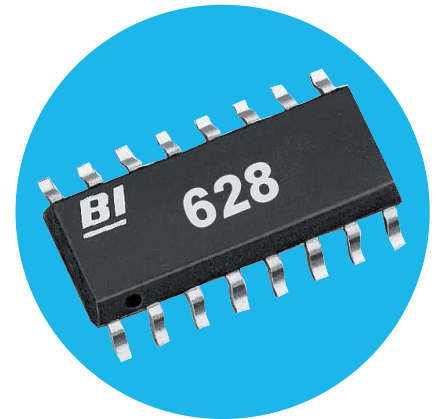



Model 628

OBSOLETE

Model 628 Series

- .220" Small Outline
- Dual-In-Line
- Thick Film
- Surface Mount
- Resistor Networks
- RoHS Compliant


 All parts are Pb-free and comply with EU Directive 2011/65/EU (RoHS2)

Electrical

| | |
|---|---|
| Standard Resistance Range, Ohms | 10 to 1Meg (Plus "0" Ohm Jumper) |
| Standard Resistance Tolerance, at 25°C | ±2% (<33Ω = ±1 Ohm) (Optional: F Tol. = ±1%) |
| Operating Temperature Range | -55°C to +125°C |
| Temperature Coefficient of Resistance | ±100ppm/°C (<100Ω = ±250ppm/°C) |
| Temperature Coefficient of Resistance, Tracking | ±50ppm/°C |
| Maximum Operating Voltage | 50Vdc or VPR |
| Insulation Resistance | ≥10,000 Megohms |

Environmental

| | |
|--|-------------------------|
| Thermal Shock plus Power Conditioning | ΔR 0.70% |
| Short Time Overload | ΔR 0.25% |
| Moisture Resistance | ΔR 0.50% |
| Mechanical Shock | ΔR 0.25% |
| Vibration | ΔR 0.25% |
| Low Temperature Operation | ΔR 0.25% |
| High Temperature Exposure | ΔR 0.50% |
| Load Life, 2000 Hours (≤330Ω = ±0.5 Ohm) | ΔR 0.50% |
| Resistance to Solder Heat (Total Immersion in solder at 280°C for 10 sec.) | ΔR 0.25% |
| Dielectric Withstanding Voltage | 200V for 1 minute |
| Temperature Exposure, Maximum | 215°C for 3 minutes |
| Marking Permanency | MIL-STD-202, Method 215 |
| Lead Solderability | MIL-STD-202, Method 208 |
| Flammability | UL-94V-0 Rated |
| Storage Temperature Range | -55°C to +150°C |

General Note

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OBSOLETE
Model 628 Series

Mechanical

| | |
|--------------------|----------------------|
| Lead Material | 96-96.5%Sn, 3.5-4%Ag |
| Lead Configuration | Gull Wing |
| Lead Coplanarity | ±0.002 in. (0.051mm) |
| Substrate Material | Alumina |
| Resistor Material | Cermet |
| Body Material | Epoxy |

Standard Resistance Values, Ohms

| A Circuit (Isolated Resistors) Bold type represents stock standard values for 'A' Circuit | | | | | | B Circuit (Bussed Resistors) Bold type represents stock standard values for 'B' Circuit | | | | | |
|--|------|------|------|-------|------|--|------|------|------|-------|------|
| Ohms | Code | Ohms | Code | Ohms | Code | Ohms | Code | Ohms | Code | Ohms | Code |
| 22 | 220 | 1.2K | 122 | 39K | 393 | 22 | 220 | 1.2K | 122 | 39K | 393 |
| 33 | 330 | 1.5K | 152 | 47K | 473 | 33 | 330 | 1.5K | 152 | 47K | 473 |
| 39 | 390 | 1.8K | 182 | 56K | 563 | 39 | 390 | 1.8K | 182 | 56K | 563 |
| 47 | 470 | 2K | 202 | 68K | 683 | 47 | 470 | 2K | 202 | 68K | 683 |
| 56 | 560 | 2.2K | 222 | 82K | 823 | 56 | 560 | 2.2K | 222 | 82K | 823 |
| 68 | 680 | 2.7K | 272 | 100K | 104 | 68 | 680 | 2.7K | 272 | 100K | 104 |
| 82 | 820 | 3.3K | 332 | 120K | 124 | 82 | 820 | 3.3K | 332 | 120K | 124 |
| 100 | 101 | 3.9K | 392 | 150K | 154 | 100 | 101 | 3.9K | 392 | 150K | 154 |
| 120 | 121 | 4.7K | 472 | 180K | 184 | 120 | 121 | 4.7K | 472 | 180K | 184 |
| 150 | 151 | 5.6K | 562 | 220K | 224 | 150 | 151 | 5.6K | 562 | 220K | 224 |
| 180 | 181 | 6.8K | 682 | 270K | 274 | 180 | 181 | 6.8K | 682 | 270K | 274 |
| 220 | 221 | 8.2K | 822 | 330K | 334 | 220 | 221 | 8.2K | 822 | 330K | 334 |
| 270 | 271 | 10K | 103 | 390K | 394 | 270 | 271 | 10K | 103 | 390K | 394 |
| 330 | 331 | 12K | 123 | 470K | 474 | 330 | 331 | 12K | 123 | 470K | 474 |
| 390 | 391 | 15K | 153 | 560K | 564 | 390 | 391 | 15K | 153 | 560K | 564 |
| 470 | 471 | 18K | 183 | 680K | 684 | 470 | 471 | 18K | 183 | 680K | 684 |
| 560 | 561 | 20K | 203 | 820K | 824 | 560 | 561 | 20K | 203 | 820K | 824 |
| 680 | 681 | 22K | 223 | 1 Meg | 105 | 680 | 681 | 22K | 223 | 1 Meg | 105 |
| 820 | 821 | 27K | 273 | | | 820 | 821 | 27K | 273 | | |
| 1K | 102 | 33K | 333 | | | 1K | 102 | 33K | 333 | | |

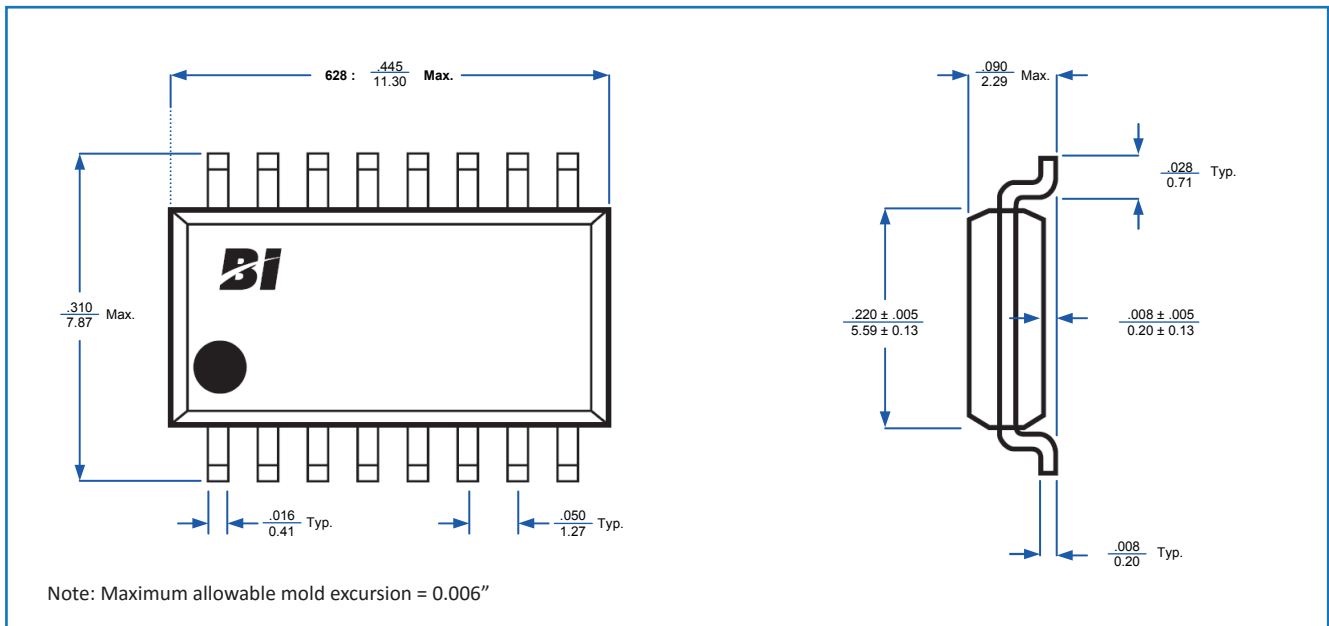
| J Circuit (Dual Terminators) | | | | | |
|------------------------------|--------------|---------|--------------|--------------|---------|
| Ohms (R1/R2) | Code (R1/R2) | Marking | Ohms (R1/R2) | Code (R1/R2) | Marking |
| 120/120 | 121/121 | 45 | 330/470 | 331/471 | 10 |
| 150/150 | 151/151 | 40 | 390/390 | 391/391 | 42 |
| 180/300 | 181/301 | 31 | 470/470 | 471/471 | 43 |
| 220/220 | 221/221 | 39 | 1K/3.3K | 102/332 | 35 |
| 220/330 | 221/331 | 08 | 3K/6.2K | 302/662 | 13 |
| 270/270 | 221/331 | 41 | 6.8K/22K | 682/223 | 29 |
| 330/390 | 331/391 | 09 | - | - | - |

General Note

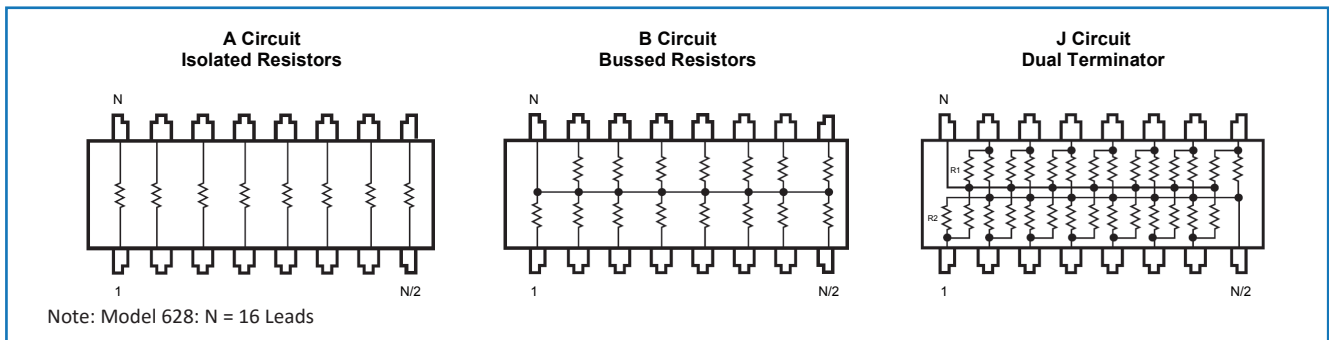
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Model 628 Series

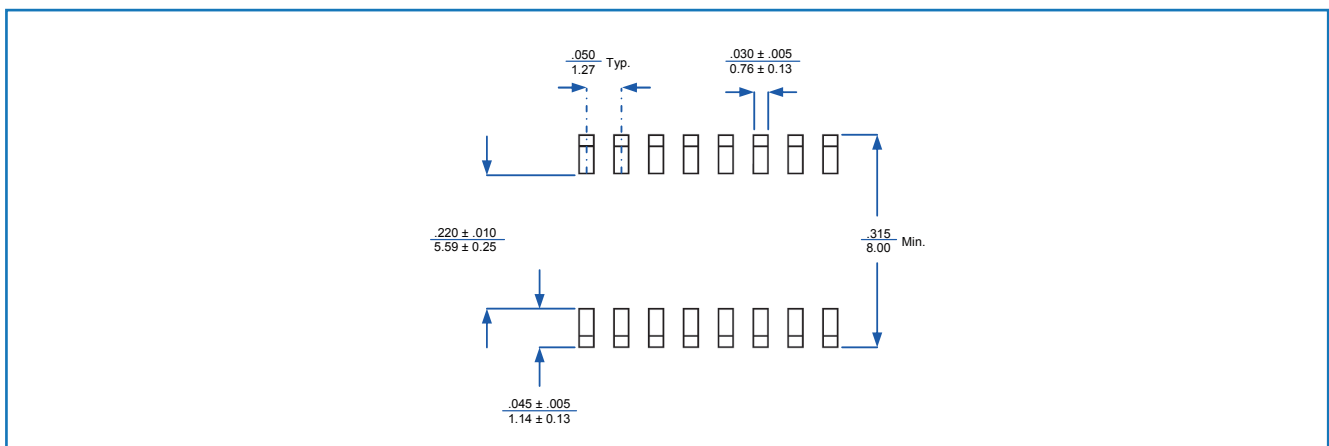
Outline Dimensions (Inch/mm)



Schematics



Solder Pad Layout (Inch/mm)



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Typical Part Marking

| Part Number: | Part Marking: |
|--------------|---------------|
| 628A330 | 8A330 |
| 628A331 | 8A331 |
| 628J221/331 | 8J08 |

Power Dissipation, Watts At 70°C

| — Resistor (Per Circuit) — | | | | |
|----------------------------|---------|------|------|------|
| Model | Package | A | B | J |
| 628 | 1.28 | 0.32 | 0.16 | 0.16 |

Packaging

| | | | |
|-----------|--|------------------------------|--|
| Standard: | Tape & Reel Conforms to requirements of EIA-481. All units orientated with lead #1 to the left of direction of feed. | | |
| Tape | Width = | 24mm | |
| | Pocket = | Embossed Plastic, Antistatic | |
| | Pitch = | 12mm | |
| Reel: | Diameter = | 13" (300mm) Maximum | |
| | Capacity = | 2,000 Units | |
| Option: | Magazines Conforms to EIA and JEDEC standards. All units orientated with lead #1 to the same side. | | |
| Magazine: | Magazine: Capacity = | 50 Units | |

General Note

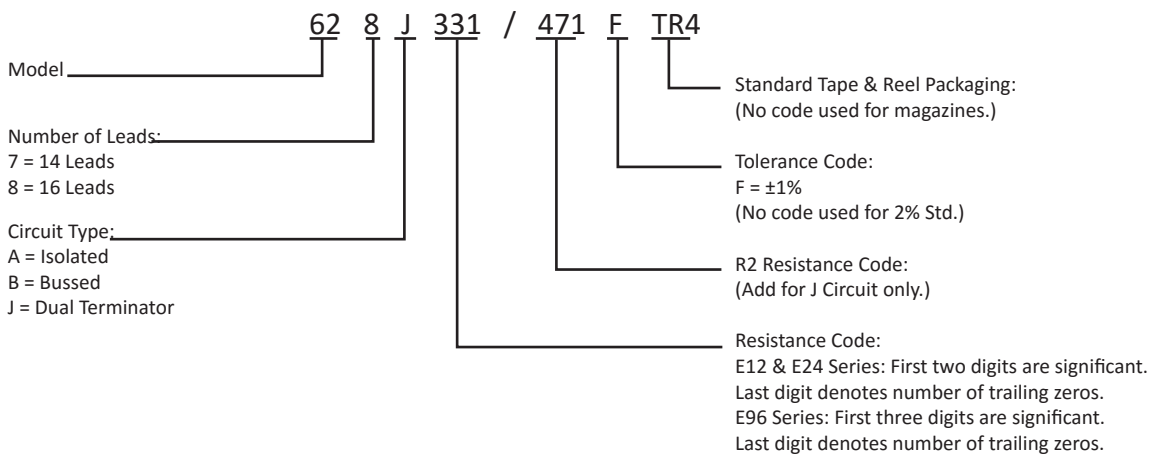
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Model 628 Series

Applicable Documents

| |
|--|
| MIL-R-914 - Resistor Networks, Fixed, Film, Surface Mount Established Reliability General Specifications |
| MIL-STD-105 - Sampling Procedures and Tables for Inspection by Attributes |
| MIL-STD-202 - Test Methods for Electronics and Electrical Component Parts |
| EIA-481 - Carrier Taping of Surface Mount Components for Automatic Handling |
| EIA-PDP-100 - SOGN-0002 Outline Dimensions |

Ordering Information



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