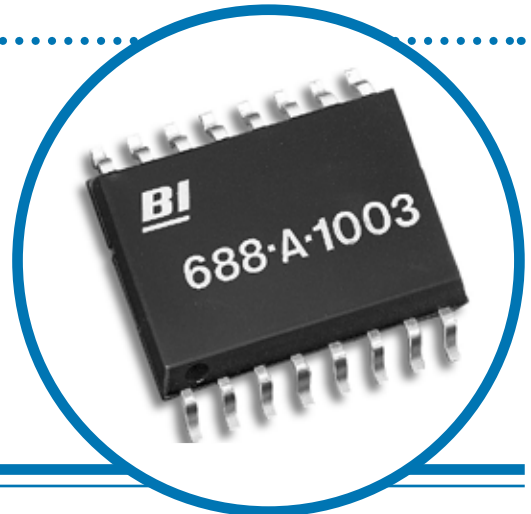


MODELS 627, 628

Model 627, 628 Series

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



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 √PR |
| 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

TT electronics reserves the right to make changes in product specification without notice or liability. All information is subject to TT electronics' own data and is considered accurate at time of going to print.

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) | | | | | | B Circuit (Bussed Resistors) | | | | | |
|--|------|------|------|-------|------|--|------|------|------|-------|------|
| Bold type represents stock standard values for 'A' Circuit | | | | | | 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 | - | - | - |

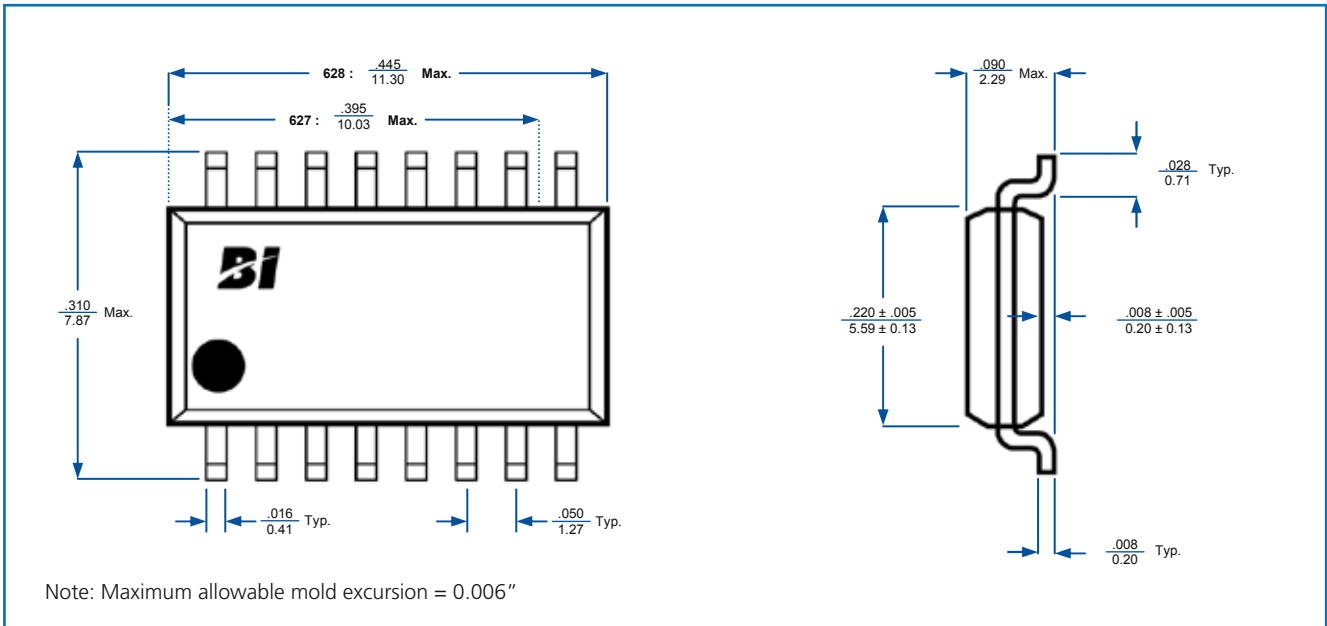
General Note

TT electronics reserves the right to make changes in product specification without notice or liability. All information is subject to TT electronics' own data and is considered accurate at time of going to print.

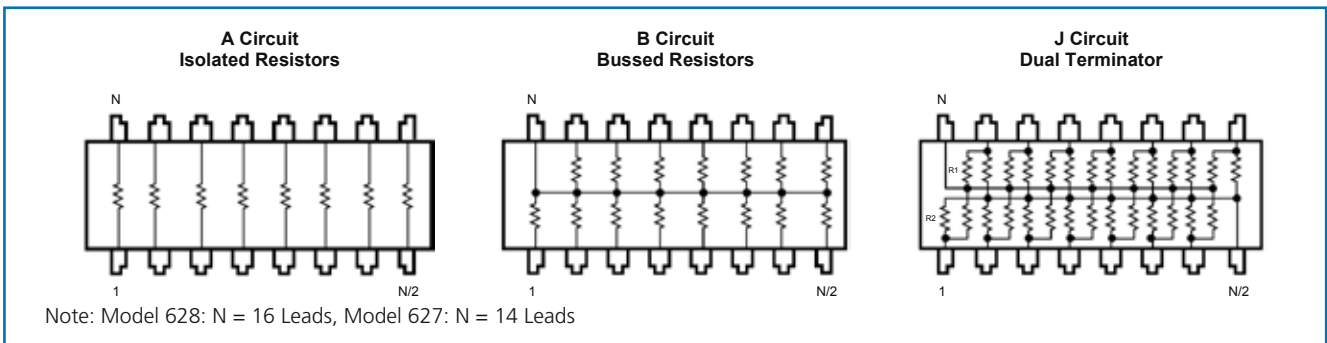


www.bitechnologies.com www.irctt.com www.welwyn-tt.com

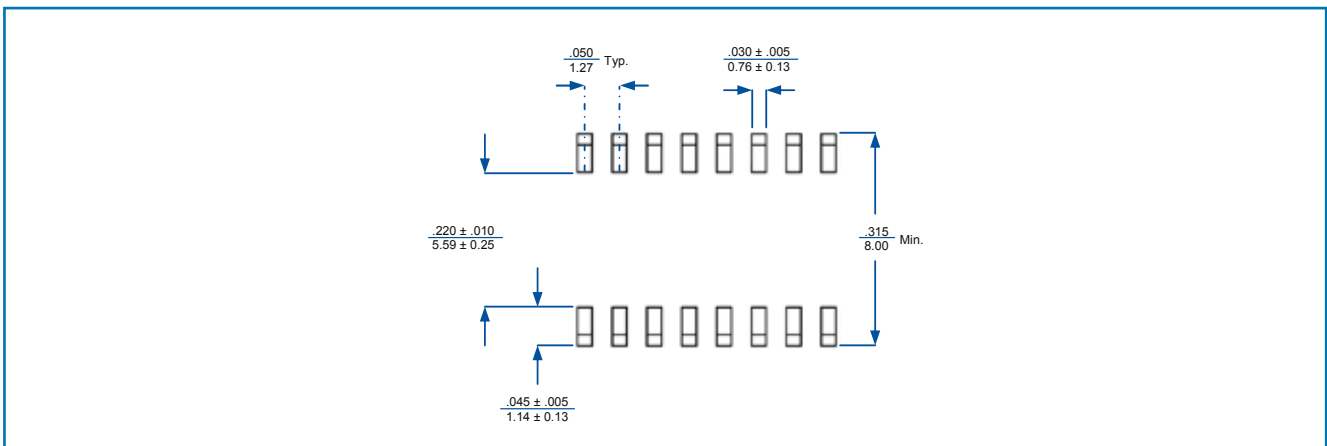
Outline Dimensions (Inch/mm)



Schematics



Solder Pad Layout (Inch/mm)



General Note

TT electronics reserves the right to make changes in product specification without notice or liability. All information is subject to TT electronics' own data and is considered accurate at time of going to print.



www.bitechnologies.com www.irctt.com www.welwyn-tt.com

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 |
| 627 | 1.28 | 0.32 | 0.16 | 0.16 |
| 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 |

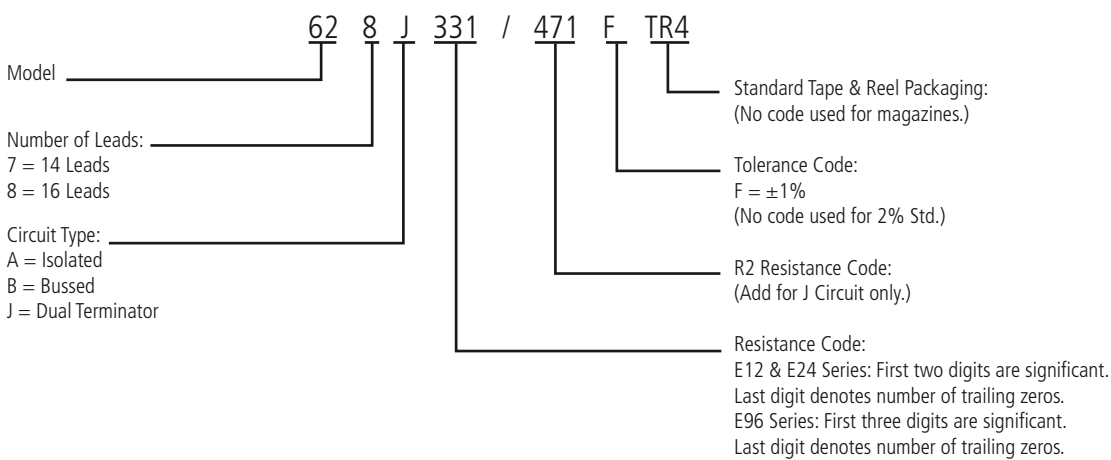
General Note

TT electronics reserves the right to make changes in product specification without notice or liability. All information is subject to TT electronics' own data and is considered accurate at time of going to print.

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



General Note

TT electronics reserves the right to make changes in product specification without notice or liability. All information is subject to TT electronics' own data and is considered accurate at time of going to print.



www.bitechnologies.com www.irctt.com www.welwyn-tt.com