

MODELS 898, 899

Dual-In-Line

Thick Film

Resistor Networks



ELECTRICAL

| | |
|--|--|
| Standard Resistance Range, Ohms * | 10 to 10Meg |
| Standard Resistance Tolerance, at 25°C | ±2% (<33 Ohms = ±2 Ohms) Optional: ±1% (F Tol.) |
| Operating Temperature Range | -55°C to +125°C |
| Temperature Coefficient of Resistance | ±100ppm/°C (<100 Ohms = ±250ppm/°C) |
| Temperature Coefficient of Resistance Tracking | ±50ppm/°C |
| Maximum Operating Voltage | 100Vdc or \sqrt{PR} |
| Insulation Resistance | ≥10,000 Megohms |

ENVIRONMENTAL (PER MIL-R-83401)

| | |
|---|-------------------------|
| Thermal Shock plus Power Conditioning | ΔR 0.70% |
| Short Time Overload | ΔR 0.50% |
| Terminal Strength | ΔR 0.25% |
| Moisture Resistance | ΔR 0.50% |
| Mechanical Shock | ΔR 0.25% |
| Vibration | ΔR 0.25% |
| Low Temperature Storage | ΔR 0.25% |
| High Temperature Exposure | ΔR 0.50% |
| Load Life, 1,000 Hours | ΔR 1.00% |
| Resistance to Solder Heat (Per MIL-STD-202, Method 210, Cond.B) | ΔR 0.25% |
| Dielectric Withstanding Voltage | 200V rms 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 +125°C |

* Plus "0 Ohm" jumper

Specifications subject to change without notice.

MECHANICAL

| | |
|--------------------|--|
| Lead Material | Copper Alloy, 60/40 Tin-Lead (Plating) |
| Substrate Material | Alumina |
| Resistor Material | Cermet |

APPLICABLE DOCUMENTS

| |
|---|
| MIL-R-83401 — Resistor Networks, Fixed, Film, General Specifications |
| MIL-STD-105 — Sampling Procedures and Tables for Inspection by Attributes |
| MIL-STD-202 — Test Methods for Electronic and Electrical Component Parts |

STANDARD RESISTANCE VALUES, OHMS

-3 Circuit (Isolated Resistors) & -1 Circuits (Bussed Resistors)

| | | | |
|-----|------|------|------|
| 22 | 390 | 5.6K | 100K |
| 27 | 470 | 6.8K | 120K |
| 33 | 510 | 8.2K | 150K |
| 39 | 560 | 10K | 180K |
| 47 | 680 | 12K | 200K |
| 51 | 820 | 15K | 220K |
| 56 | 1K | 18K | 270K |
| 68 | 1.2K | 20K | 330K |
| 82 | 1.5K | 22K | 390K |
| 100 | 1.8K | 27K | 470K |
| 120 | 2K | 33K | 510K |
| 150 | 2.2K | 39K | 560K |
| 180 | 2.7K | 47K | 680K |
| 200 | 3.3K | 51K | 820K |
| 220 | 3.9K | 56K | 1Meg |
| 270 | 4.7K | 68K | |
| 330 | 5.1K | 82K | |

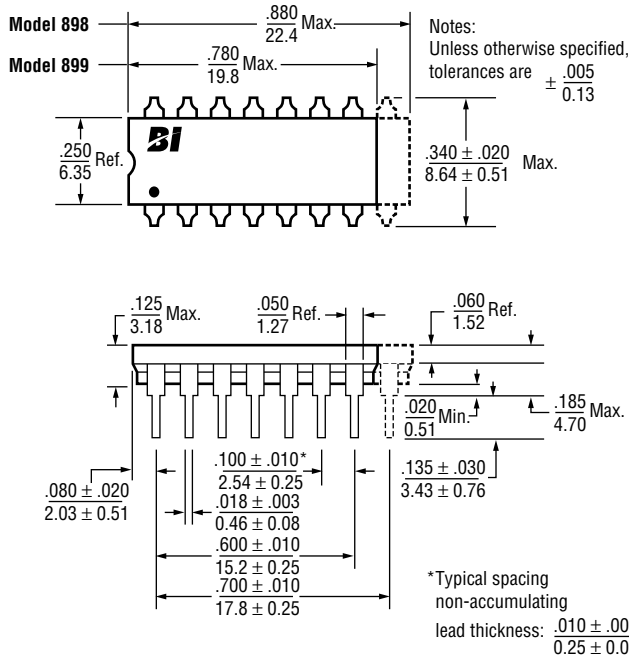
-5 Circuit (Dual Terminators)

| R1/R2 | R1/R2 | R1/R2 | R1/R2 |
|---------|---------|---------|---------|
| 180/390 | 220/330 | 330/470 | 3K/6.2K |
| 220/270 | 330/390 | 330/680 | |

POWER DISSIPATION, WATTS AT 70°C

| Model | Package | —Resistor (Per Circuit)— | | |
|-------|---------|--------------------------|------|------|
| | | -1 | -3 | -5 |
| 898 | 2.0 | .125 | .250 | .125 |
| 899 | 1.8 | .125 | .250 | .125 |

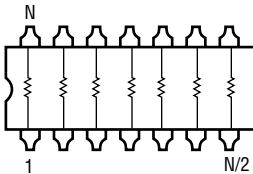
OUTLINE DIMENSIONS (Inch/mm)



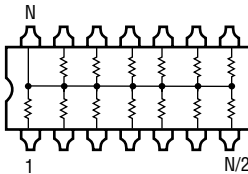
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SCHEMATICS

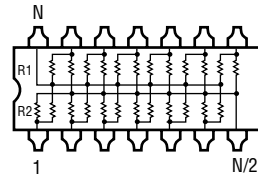
-3 Circuit - Isolated Resistors



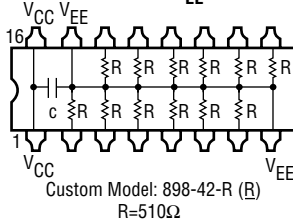
-1 Circuit - Bussed Resistors



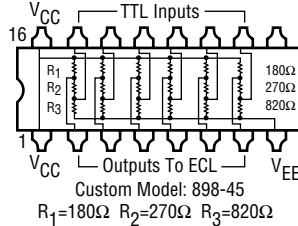
-5 Circuit - Dual Terminator



-42 Circuit - 5.2V (V_{EE}) Pull-Down

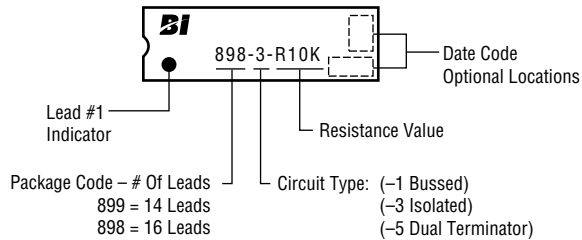


-45 Circuit - TTL to ECL Translator



Note: Model 899: N = 114 Leads, Model 898: N = 16 Leads.
Custom circuits are available. Consult Factory.

TYPICAL PART MARKING



PACKAGING

Standard: Magazines

All Units oriented with lead #1 to the same side.

| | | | |
|-----------|----------|---|--------------------|
| Magazine: | Material | = | Antistatic Plastic |
| | Capacity | = | 25 Units |

ORDERING INFORMATION

