MODEL 627 V100

Designed For Pentium® Power Supply Surface Mount Resistor Networks

APPLICATION

- Designed for P54C, P54C-VR and P54C-VRE Pentium® Processors when used in conjunction with Linear Technology Models LT 1266/1267 or LT 1584/1585 voltage regulator IC's.

ELECTRICAL

Standard Resistance Tolerance, at 25°C	±2%
Operating Temperature Range	-55°C to +125°C
Temperature Coefficient of Resistance	±100ppm/°C
Temperature Coefficient of Resistance Tracking	50ppm/°C
Voltage Coefficient of Resistance	±100ppm/V
Maximum Operating Voltage	25Vdc
Insulation Resistance, Minimum	10,000 Megohms

ENVIRONMENTAL (PER MIL-R-83401)

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 Shock	ΔR 0.25%
Low Temperature Operation	ΔR 0.25%
High Temperature Exposure	ΔR 0.50%
Load Life, 2,000 Hours (≤33 Ohms = ±0.5 Ohm)	ΔR 0.50%
Resistance to Solder Heat	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-O Rated
Storage Temperature Range	-55°C to +150°C

Specifications subject to change without notice.
Pentium® is a registered trademark of Intel Corporation.

MECHANICAL

Lead Material	Copper Alloy, 60/40 Tin-Lead (Dipped)
Lead Configuration	Gull Wing
Lead Coplanarity	±0.002 in. (0.057mm)
Substrate Material	Alumina
Resistor Material	Cermet
Body Material	Epoxy

MATCHING (VOLTAGE RATING)

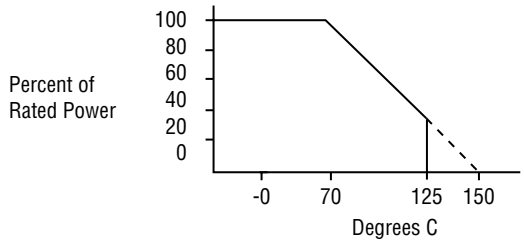
$\frac{V2}{V1}$ = 2.174±1% (Sets LTC1266 VFB = 1.150V±1%)

$\frac{V3}{V2}$ = 1.320±1% (Sets 3.300V±1% for P54C)

$\frac{V4}{V2}$ = 1.353±0.5% (Sets 3.383V±0.5% for P54C-VR)

$\frac{V5}{V2}$ = 1.410±0.25% (Sets 3.525V±0.25% for P54C-VRE)

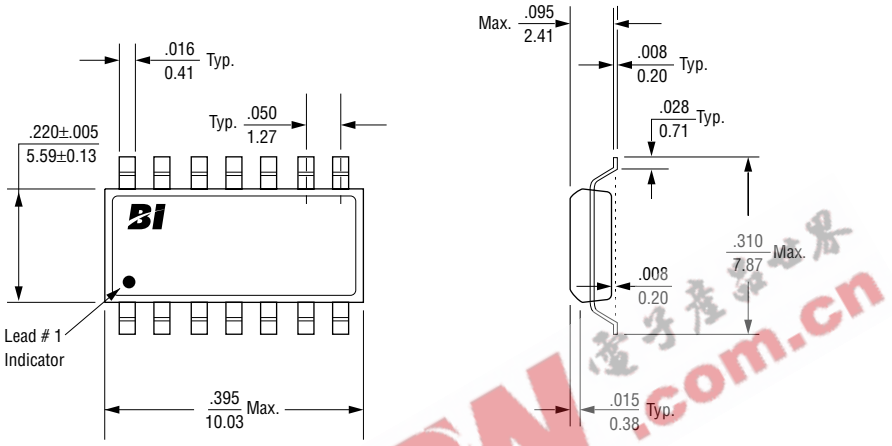
POWER DERATING CURVE



POWER DISSIPATION, WATTS @ 70°C

Model	Package	Per Resistor
627 V100	0.625	0.125

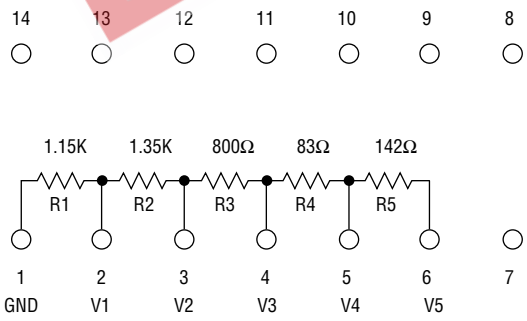
OUTLINE DIMENSIONS (Inch/mm)



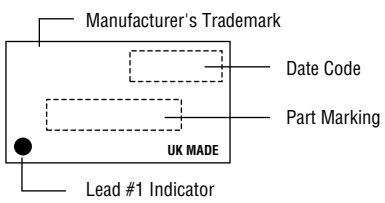
Note: Maximum allowable mold excursion = 0.006"

4

SCHEMATIC



PART MARKING



Part Marking:
627V100

PACKAGING

Standard: Tape & Reel

Conforms to requirements of EIA-481.

All units oriented with lead #1 to the left of direction of feed.

Tape:	Width	=	24mm
	Pocket	=	Embossed Plastic, Antistatic
	Pitch	=	12mm
Reel:	Diameter	=	13" (330mm) Maximum
	Capacity	=	2,000 Units

Option: Magazines

Conforms to EIA and JEDEC standards.

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

Magazine:	Capacity	=	50 Units

ORDERING INFORMATION

627 **V100** **TR4**

Model Series — 627

Standard Tape & Reel Packaging: (No code used for Magazines.) — TR4

Circuit Type: V100 = Pentium® Resistor Network — V100