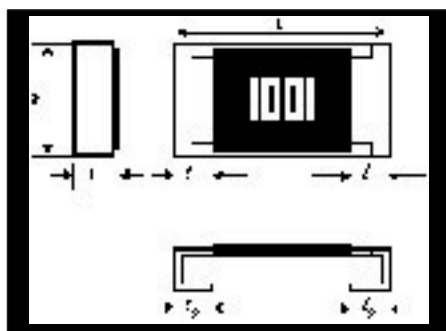


MEGASTAR-OHM'S precision thick film chip resistors provide low temperature coefficients at a very economical cost. These resistors are a dependable solution for maintaining resistance stability over changing temperature ranges found in automotive, computer, and a variety of other industrial and commercial applications.

FEATURES

1. A wide range of power ratings for design flexibility
2. T.C.R. of either ± 100 ppm/ $^{\circ}\text{C}$ or ± 50 ppm/ $^{\circ}\text{C}$ available with all power ratings.
3. Excellent solderability with both flow and reflow soldering operations.
4. Operating temperatures ranges from -55°C to $+125^{\circ}\text{C}$.

DIMENSIONS



TYPE (size)	RGC 16S (0402)	RGC 16 (0603)	RGC 10 (0805)	RGC 18 (1206)
L	1.0 \pm 0.05	1.6 \pm 0.1	2.0 \pm 0.15	3.1 \pm 0.2
W	0.5 \pm 0.05	0.8 \pm 0.1	1.25 \pm _{0.05} ⁰	1.55 \pm 0.1
H	0.35 \pm 0.05	0.45 \pm 0.1	0.6 \pm 0.1	0.6 \pm 0.1
l ₁	0.2 \pm 0.1	0.25 \pm 0.1	0.4 \pm 0.2	0.45 \pm 0.2
l ₂	0.25 \pm _{0.1} ^{0.15}	0.3 \pm 0.1	0.3 \pm _{0.1} ^{0.2}	0.3 \pm _{0.1} ^{0.2}
Unit Weight	0.6 mg	2 mg	5 mg	9 mg

RATINGS

Resistance values indicated by four digit marking on 0805 and larger components.

Type (Size)	Rated Power @ 70°C W	Maximum Working Voltage V	Maximum Overload Voltage V	Resistance Temperature Coefficient ppm/ $^{\circ}\text{C}$	Resistance Range and Tolerance (E96 Series)	
					$\pm 0.5\%$ (D)	$\pm 1.0\%$ (F)
RGC 16S (0402)	0.063	50	100	± 50	100 to 1.0M	100 to 1.0M
				± 100	—	10 to 3.3M
RGC 16 (0603)	0.063	50	100	± 50	100 to 1.0M	100 to 1.0M
				± 100	—	3.3 to 3.3M
RGC 10 (0805)	0.1	150	300	± 50	10 to 3.3M	10 to 3.3M
				± 100	—	3.3 to 3.3M
RGC 18 (1206)	0.125	200	400	± 50	10 to 4.7M	10 to 4.7M
				± 100	—	3.3 to 4.7M

For T.C.R. less than 50ppm/ $^{\circ}\text{C}$ and resistance tolerance less $\pm 0.5\%$, use RNC type.

Part Numbering System

RGC 18K XXXX D T

Product Type
Precision Thick Film Chip Resistor Low T.C.R.

CODE	WATTAGE (SIZE)
16S	1/16 watt (0402)
16	1/16 watt (0603)
10	1/10 watt (0805)
18	1/8 watt (1206)

T.C.R.	
CODE	ppm/ $^{\circ}\text{C}$
C	± 50 ppm/ $^{\circ}\text{C}$
K	± 100 ppm/ $^{\circ}\text{C}$

Resistance Value	
4-Digit Code E96	
CODE	VALUES
1002	10.0 K
10R0	10.0

Packaging	
CODE	DETAIL
B	Bulk
T	Tape & Reel (paper)
TE	Tape & Reel (plastic)

Please refer to packaging explanation on page 6.

TOLERANCE	
CODE	%
B	$\pm 0.5\%$
D	$\pm 0.5\%$
F	$\pm 1.0\%$



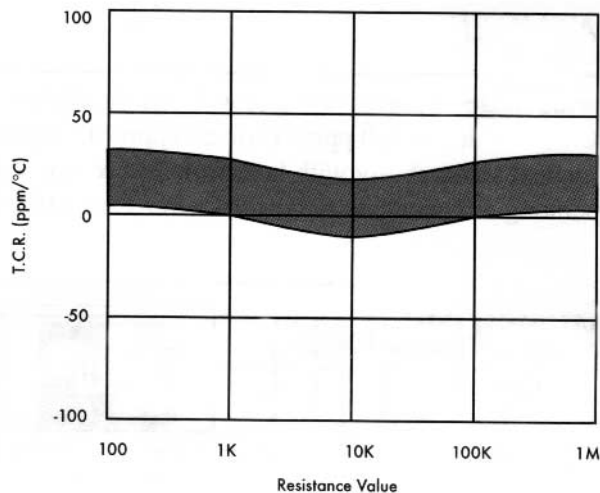
RGC 16S, 16, 10, 18

• PERFORMANCE CHARACTERISTICS

DESCRIPTION	PERFORMANCE
Resistance Temperature Coefficient	As specified in table
Short-time overload	±0.5% maximum
Insulation Resistance	1,000 M minimum
Terminal Strength	±0.25% maximum
Vibration	±0.25% maximum
Solder-Heat resistance	±0.25% maximum
Solderability	95% minimum coverage
Temperature Cycle	±0.25% maximum
Load Life in Moisture	±0.5% maximum
Load Life	±0.5% maximum
Test methods per EIA 575 and JIS C5202	

• TYPICAL PERFORMANCE

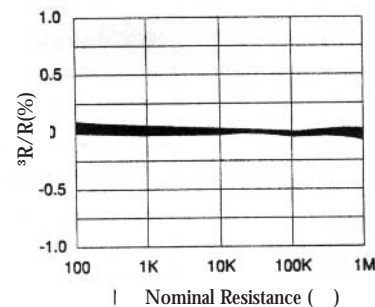
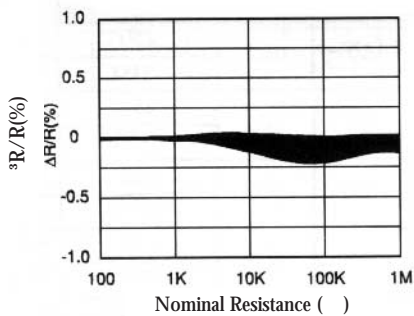
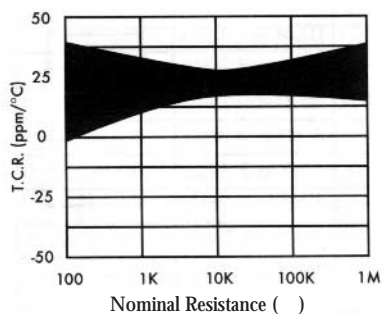
Resistance Temperature Coefficient
RGC 18, ±50ppm/°C



PERFORMANCE CURVES

Short Time Overload

Solder Heat Resistance (260°C, 10 sec)



Nominal Resistance ()

Temperature Cycle (-55°C/125°C, 5 cycles)

Load Life (Rated Load) (70°C, RCWV 1,000 hrs)

