



RKL B, RKHB

LEAD FREE

(SIP TYPE)

INTRODUCTION:

MEGASTAR-OHM Thick Film Resistor networks have metal glaze elements on the ceramic substrates with strong chip-construction terminals and are coated with special epoxy resin. These conformal coated single-in-line (SIP) resistor networks are designed to meet a variety of application requirements in a compact, highly reliable package.

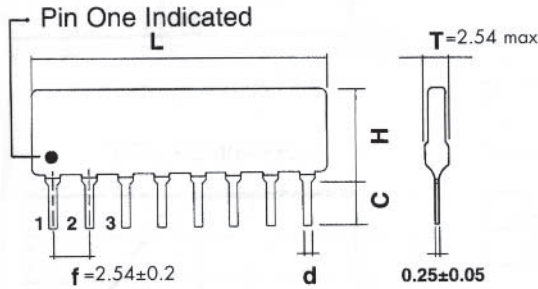
APPLICATION

- Control Circuits of VCR, Computer, Fax, Car & Air conditioner
- Color TV & other electronic equipment for consumer use.

FEATURES

- Low and high profile
- Miniature, high density packaging
- Combinations of different Ohmic values area available
- High reliability with RuO₂ Paste

DIMENSIONS



# of pins	4	5	6	7	8	9	10	11	12	13	14	H	MAX
L mm	10.2	12.7	15.3	17.8	20.4	22.1	25.4	28.0	30.5	33.1	35.6	RKL B	RKHB
												5.08	7.5

C=3.0±0.5
d=0.5±0.1

Dual Terminators (R1/R2) (OHM)	
For circuit symbol codes: E, P, R	
Code	R1/R2
X1	160/240
X2	180/390
X3	220/270
X4	220/330
X5	330/390
X6	330/470
X7	330/680
X8	1.5K/3.3K
X9	3.0K/6.2K
XX	SPECIAL

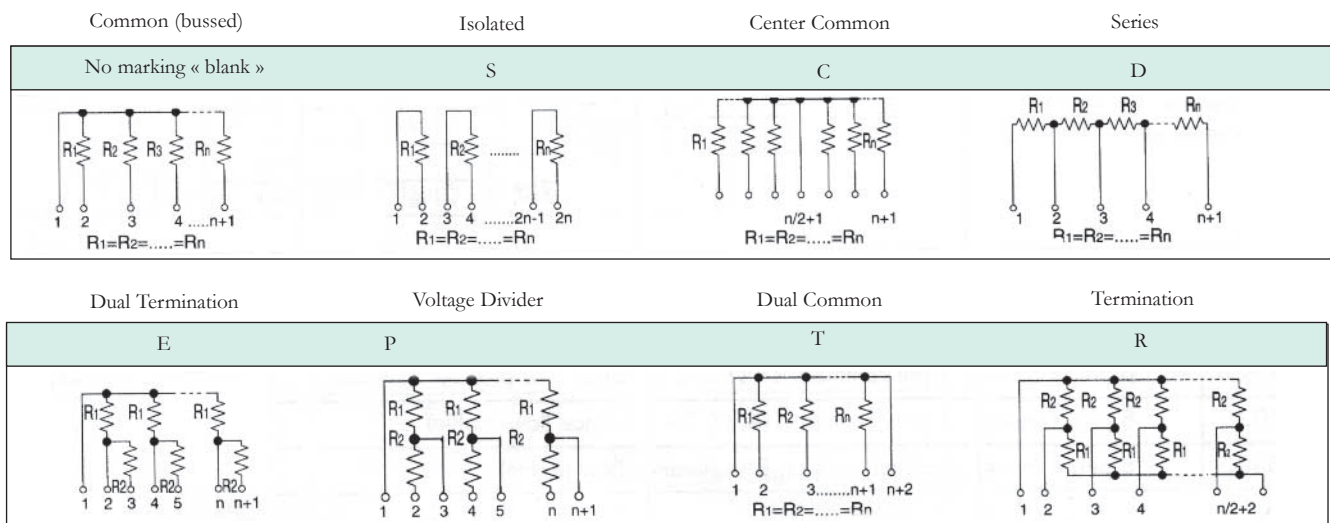
STANDARD RESISTANCE (OHM) E-12 SERIES

10	12	15	18	22	27	33	39	47	56	68	82
100	120	150	180	220	270	330	390	470	560	680	820
1K	1.2K	1.5K	1.8K	2.0K	2.2K	2.7K	3.3K	3.9K	4.7K	5.6K	6.8K
8.2K	10K	12K	15K	18K	20K	22K	27K	33K	39K	47K	56K
68K	82K	100K	120K	150K	180K	220K	270K	330K	390K	470K	560K
680K	820K	1M	1.2M	1.5M	1.8M	2.2M	2.7M	3.3M	3.9M	4.7M	

GENERAL SPECIFICATION

Operating Temp. Range		-55°C ~ 125°C		Wattage / Element		RKL B		RKHB		
TCR	±100ppm	50ohm ~ 2.2M ohm		S Circuits	Others	All Styles				
	±250ppm	< 50ohm or > 2.2M ohm				0.2W	0.125W	0.25W		
Rating Ambient Temp.		+70°C		Max. Working Voltage		100V		200V		
Resistance Range (E ₁₂ & E ₂₄ Series)	R Style		Others		Resistance Tolerance		F=±1%, G=±2%, J=±5%			
	100Ω-10K		10Ω-4.7MΩ							

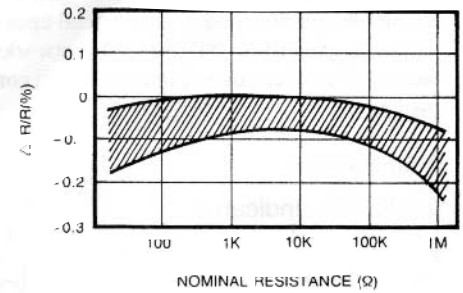
INTERNAL CIRCUIT CONSTRUCTION & CIRCUIT SYMBOLS



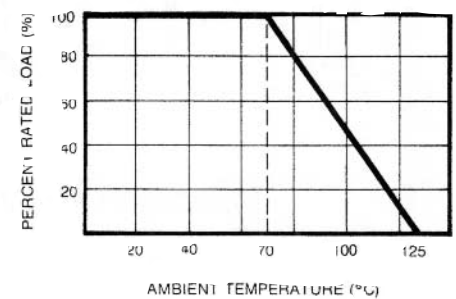


Test Items	Specification
Insulation Resistance (200Vdc Applied)	10 ⁴ M or greater
Thermal Shock (-55°C to 125°C, 5 Cycles)	³ R/R: ± (0.5% + 0.1)
Short Time Overload (2.5 x Rated Voltage, 5 sec.)	³ R/R: ± (0.5% + 0.1)
Resistance to Soldering Heat (260°C±5°C, 10 sec.)	³ R/R: ± (0.5% + 0.1)
Heat Shock (25°C to 125°C, 5 Cycles.)	³ R/R: ± (0.5% + 0.1)
Moisture Resistance, Constant State (40°C, 95% R.H., 1,000hrs)	³ R/R: ± (1% + 0.1)
High Temperature Exposure (125°C, 100hrs)	³ R/R: ± (1% + 0.1)
Moisture Load Life (1,000hrs., 40°C, 95% R.H., -Rated Voltage Cycling)	³ R/R: ± (3% + 0.1)
Load Life (1,000 hrs., Rated Voltage Cycling at 70°C)	³ R/R: ± (3% + 0.1)
Load Pull Strength (1kg, 10 sec.)	³ R/R: ± (0.5% + 0.1)
Temperature Coefficient (-55°C to 125°C)	±100ppm/°C ±250ppm/°C for 50 or >2.2M
Solderability (230°C for 5 sec.)	95% min. coverage
Note: Test methods and conditions are in accordance with MIL-R-83401	

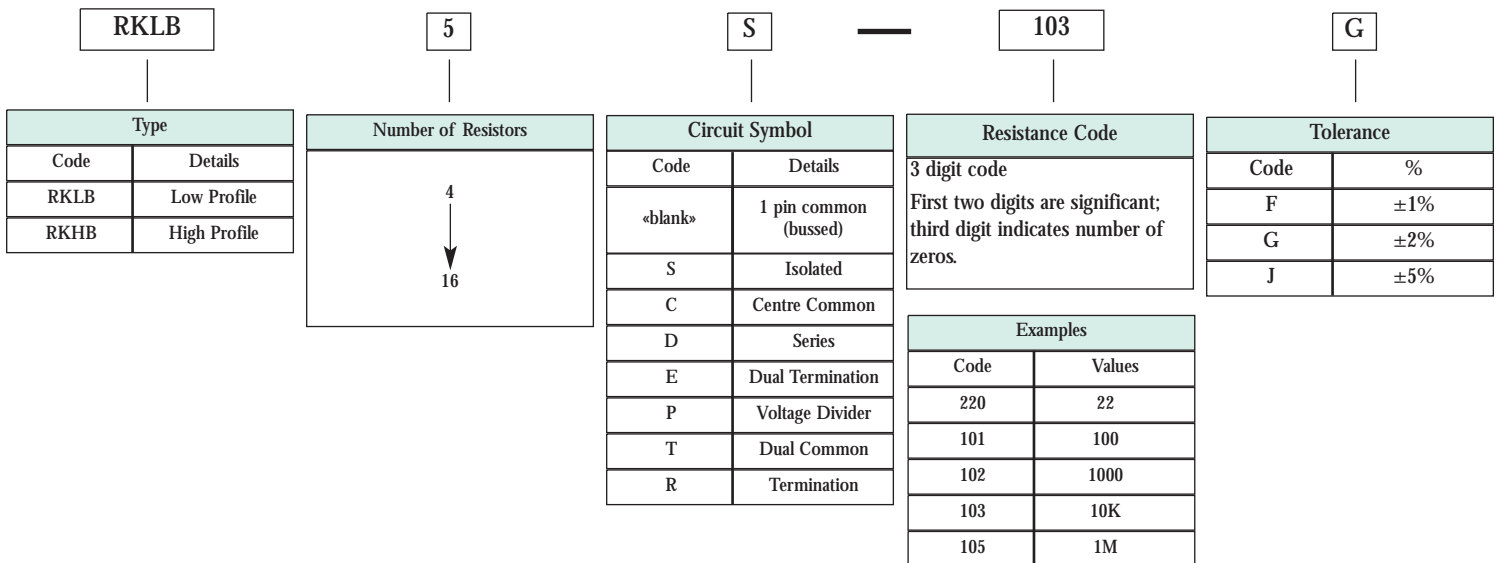
SHORT TIME OVERLOAD



DERATING CURVE

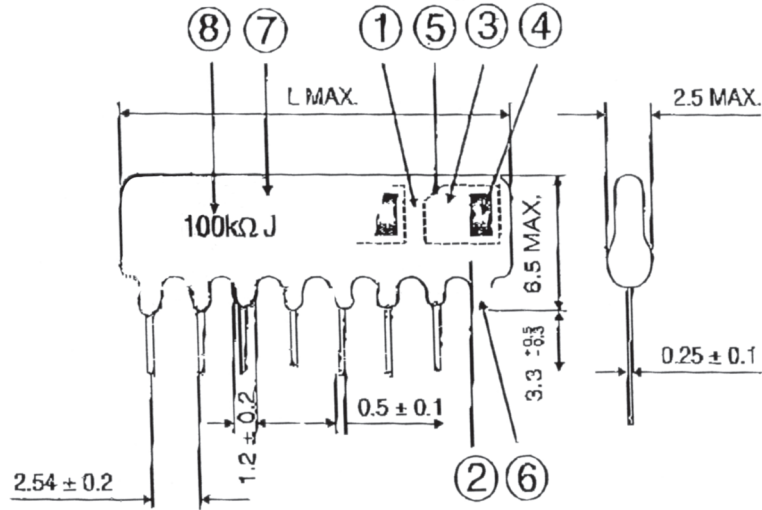


Part Numbering System



Examples	
RKLB5S — 103G	10 pin, 5 resistor, Isolated, 10K , 2% tolerance (low profile)
RKLB5 — 102G	6 pin, 5 resistor, 1 pin common, 1K , 2% tolerance (low profile)
RKLB7 — 103G	8 pin, 7 resistor, 1 pin common, 10K , 2% tolerance (low profile)
RKLB4S — 563G	8 pin, 4 resistor, Isolated, 56K , 2% tolerance (low profile)

STRUCTURE OF RESISTOR NETWORKS



No.	Items
1	Ceramic Substrate (Al_2O_3 , SiO_2 , MgO , etc.)
2	Pin Connection
3	Printed Conductor (Ag, Pd)
4	Resistive Layer
5	Glass Layer
6	100% Tin Plated Copper Terminal (Tested pb 23.7ppm, cr 84ppm meet RoHS standard)
7	Epoxy Resin (SiO_2 , TiO_2 , Sb_2O_3 and pigment etc.)
8	Marking