

RESISTORS

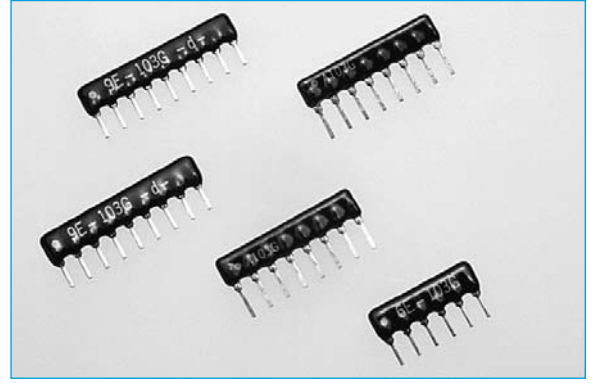
- Low-profile
- Epoxy dipped
- 5 to 13-pin

The Dubilier range of SIL networks features 2% accuracy in a low-cost package.

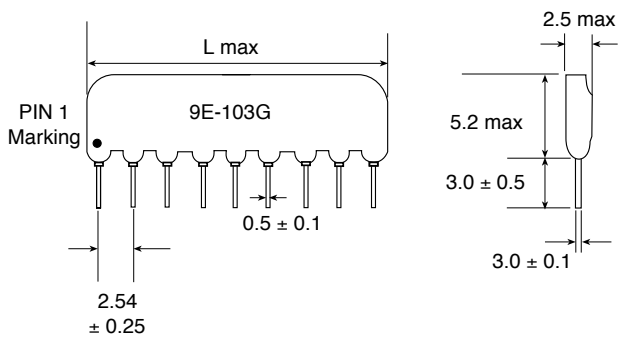
The low-profile epoxy package allows the device to be used in locations where moulded parts do not fit.

Isolated and common-terminal designs are available, allowing the simple, reliable insertion of up to 12 resistors at once.

RESISTOR NETWORK SIL



OUTLINE DRAWING



No of Pins	5	6	7	8	9	10	11	12	13
L max	12.7	15.3	17.8	20.4	22.9	25.4	28.0	30.5	33.1

RANGE & TOLERANCES

Parameter	Performance	Limits
Power Rating per Element	0.125W	@ 70°C
Temperature Range	-55° to +125°C	Derating linearly from 70°C
Resistance Range	33Ω to 1MΩ	E - 24 series
Resistance Tolerance	± 2% (G)	
Temperature Coefficient	± 100 ppm/°C ± 250ppm/°C	50Ω ≥ 2.2MΩ <50Ω - 2.2MΩ
Max Working Voltage	100V	
Max Overload Voltage	200V	

ORDERING INFORMATION

9	E	103	G
N° Pins	Type	Value	Tolerance
5 to 13	M = Isolated E = Common	3 digit code : Last digit is decade multiplier. First two digits are first digits of value.	2%

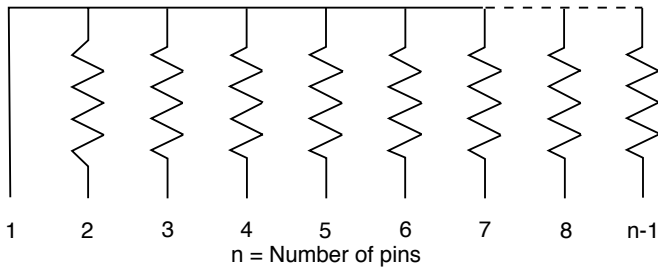
SPECIFICATION

Short Term Overload	$\Delta R/R \pm (1\% + 0.05\Omega)$ After application of 2 1/2 x rated voltage, or the maximum overload voltage, whichever smaller, for a period of 5 secs. Resistance change to be within specification, with no evidence of arcing, burning or charring.
Vibration	$\Delta R/R \pm (0.5\% + 0.5\Omega)$ Resistors are to be subjected to vibration of amplitude 0.8mm for 2 hours in each of three mutually perpendicular directions. The vibration frequency shall be swept from 10 to 55 to 10Hz in 1 minute. Resistance change to be within specification with no evidence of damage.
Dielectric Strength	Components shall withstand twice their rated voltage for 1 minute applied between termination and substrate. No evidence of arcing, burning or charring.
Solderability	$\Delta R/R \pm (1\% + 0.05\Omega)$ After dipping at 260°C ± 5°C for 10 seconds, resistance change to be within specification, with no evidence of arcing, burning or charring. Terminations shall maintain a minimum of 75% coverage following the procedures of MIL-STD-202E.
Load Life	$\Delta R/R \pm (2\% + 0.05\Omega)$ After 1000 hours application of the rated voltage with a duty cycle of 1 1/2 hours ON and 1/2 hour OFF, at 70°C. Resistance change to be within specification, with no evidence of arcing, burning or charring.
Moisture Load	$\Delta R/R \pm (2\% + 0.05\Omega)$ After 1000 hours application of the rated voltage with a duty cycle of 1 1/2 hours ON and 1/2 hour OFF, at 40°C and 90-95% RH. Resistance change to be within specification, with no evidence of arcing, burning or charring.
Voltage Coefficient	$\Delta R/R < 100\text{ppm/V}$
Flammability	Product is conformally coated with epoxy resin conforming to UL94V-0.

SECTION 4

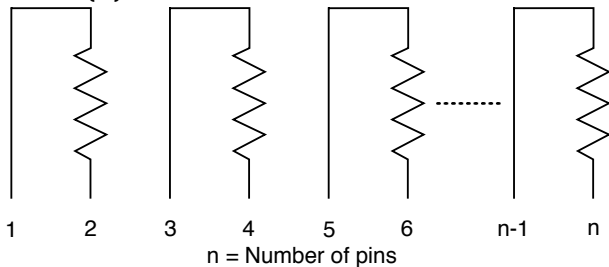
SIL PIN-OUTS

Common (E)



Common parts are characterised by having a number of resistive elements, all of the same nominal value. All elements are connected to pin 1.

Isolated (M)



Isolated parts are characterised by having a number of resistive elements, all of the same nominal value. All elements are independent.