

# Thick Film, Dual-in-Line Resistor Networks



### FEATURES

- 14, 16 or 20 terminal package
- Isolated, bussed or TTL-terminator circuits
- Molded case construction
- Highly stable thick film elements
- Reflow solderable
- Compatible with automatic surface mounting equipment
- Reduces total assembly costs
- For wave flow soldering contact factory

STANDARD ELECTRICAL SPECIFICATIONS										
MODEL	ELEMENT P <sub>70°C</sub> W	PACKAGE POWER RATING P <sub>70°C</sub> W			CIRCUIT	LIMITING ELEMENT VOLTAGE MAX. V ≅	TEMPERATURE COEFFICIENT <sup>1)</sup> ppm/°C	TOL. %	RESISTANCE RANGE Ω	E-SERIES
		14	16	20						
		SOMC	0.08	1.05						
	0.16	1.125	1.28	1.60	03					
	0.08	1.05	1.20	1.52	05					

<sup>1)</sup>Temperature Range: - 55°C to + 125°C

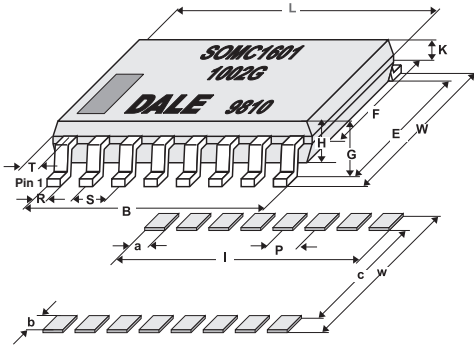
- Power rating depends on the max. temperature at the solder point, the component placement density and the substrate material
- Jumper: Zero-Ohm-Resistor on request (100mΩ)
- Packaging: according to EIA; see appropriate catalog or web page

TECHNICAL CHARACTERISTICS				
PARAMETER	UNIT	01 CIRCUIT	03 CIRCUIT	05 CIRCUIT
Rated Dissipation at 70°C per Element	W	0.08	0.16	0.08
Limiting Element Voltage <sup>2)</sup>	V ≅	50		
Voltage Coefficient	ppm/V	< 50		
Insulation Voltage (1min)	V <sub>dc/ac peak</sub>	200		
Category Temperature Range	°C	- 55 / + 150		
Insulation Resistance	Ω	> 10 <sup>10</sup>		
TC Tracking (- 55°C to + 125°C)	ppm/°C	50		

<sup>2)</sup>Rated voltage:  $\sqrt{P \times R}$

ORDERING INFORMATION					
<b>01, 03 Schematic</b>	<b>16 20</b>	<b>01 03</b>	<b>xxx or xxxx</b>	<b>G</b>	
SOMC MODEL	NUMBER OF LEADS	SCHEMATIC	R <sub>1</sub> VALUE	TOLERANCE	
			First 2 digits (3 for F tolerance) are significant figures. Last digit specifies number of zeros to follow.	F = ± 1% G = ± 2% J = ± 5%	
<b>05 Schematic</b>	<b>16 20</b>	<b>05</b>	<b>xxx or xxxx</b>	<b>xxx or xxxx</b>	<b>G</b>
SOMC MODEL	NUMBER OF LEADS	SCHEMATIC	R <sub>1</sub> VALUE	R <sub>2</sub> VALUE	TOLERANCE
			First 2 digits (3 for F tolerance) are significant figures. Last digit specifies number of zeros to follow.		F = ± 1% G = ± 2% J = ± 5%

**16-TERMINAL DEVICE**



SOLDER PAD DIMENSIONS [in millimeters]						
	a	b	c	l	p	w
WAVE	0.64	1.91	5.34	9.53	1.27	9.15
REFLOW	0.64	1.91	5.34	9.53	1.27	9.15

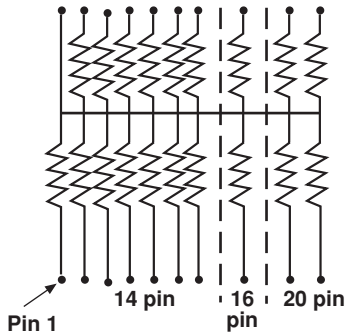
The dimensions shown are for 16 pin part. For parts with different pin numbers use the same pitch and add or subtract pads as required.

Note: Maximum solder reflow temperature + 255°C

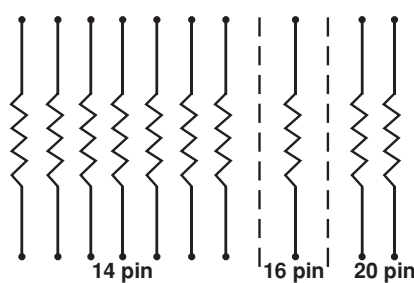
DIMENSIONS [in millimeters]											
PIN NO#	L	W	B	E	F	G	H	K	R	S	T
14	9.91	7.62	7.62	6.20	5.59	2.16	2.03	0.914	0.457	1.27	1.14
16	11.18	7.62	8.89	6.20	5.59	2.16	2.03	0.914	0.457	1.27	1.14
20	13.72	7.62	11.43	6.20	5.59	2.16	2.03	0.914	0.457	1.27	1.14
Tol	± 0.254	± 0.381	± 0.254	± 0.381	± 0.127	± 0.127	± 0.127			± 0.254	

**CIRCUIT SCHEMATICS**

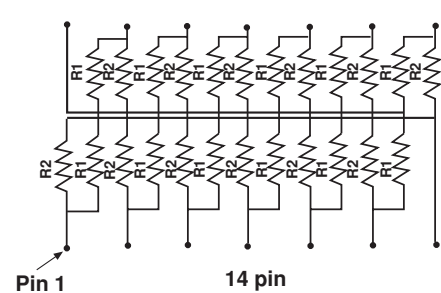
01 Circuit



03 Circuit



05 Circuit



PERFORMANCE		
TEST	CONDITIONS OF TEST	TEST RESULTS
Power Conditioning	MIL STD-202	± 0.5%
Load Life at 70°C	MIL STD-202	± 0.5%
Short Time Overload	MIL STD-202	± 0.25%
Thermal Shock	MIL STD-202	± 0.5%
Moisure Resistance	MIL STD-202	± 0.5%
Resistance to Soldering Heat	MIL STD-202	± 0.25%
Low Temperature Operation	MIL STD-202	± 0.25%
Vibration	MIL STD-202	± 0.25%
Shock	MIL STD-202	± 0.25%
Terminal Strength	MIL STD-202	± 0.25%