

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 $P_{70^{\circ}\text{C}}$ W	PACKAGE POWER RATING $P_{70^{\circ}\text{C}}$ W			CIRCUIT	LIMITING ELEMENT VOLTAGE MAX. $V \cong$	TEMPERATURE COEFFICIENT ¹⁾ ppm/ $^{\circ}\text{C}$	TOL. %	RESISTANCE RANGE Ω	E-SERIES
		14	16	20						
SOMC	0.08	1.05	1.20	1.52	01	50	100	1, 2, 5	10R – 1M	24
	0.16	1.125	1.28	1.60	03					
	0.08	1.05	1.20	1.52	05					

¹⁾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 (100m Ω)
- Packaging: according to EIA; see appropriate catalog or web page

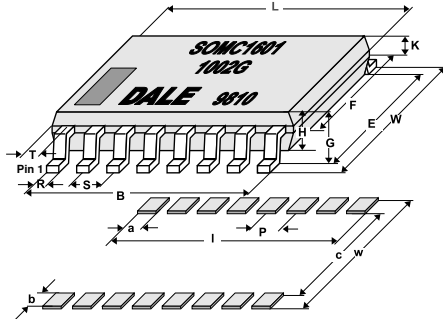
TECHNICAL CHARACTERISTICS

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 ²⁾	$V \cong$	50		
Voltage Coefficient	ppm/V	< 50		
Insulation Voltage (1min)	$V_{dc/ac \text{ peak}}$	200		
Category Temperature Range	$^{\circ}\text{C}$	- 55 / + 150		
Insulation Resistance	Ω	> 10 ¹⁰		
TC Tracking (- 55°C to + 125°C)	ppm/ $^{\circ}\text{C}$	50		

²⁾Rated voltage: $\sqrt{P \times R}$

ORDERING INFORMATION

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

**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

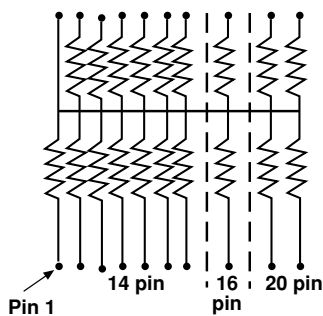
The dimensions shown are for 16 pin part. For parts with different pin numbers use the same pitch and add or subtract pads as required.

Note: Maximum solder reflow temperature + 255°C

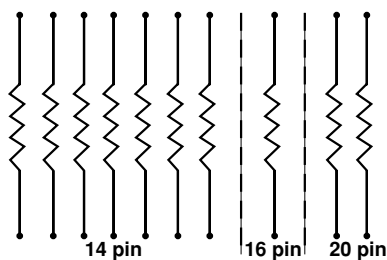
DIMENSIONS [in millimeters]											
PIN NO#	L	W	B	E	F	G	H	K	R	S	T
14	9.91	7.62	7.62	6.20	5.59	2.16	2.03	0.914	0.457	1.27	1.14
16	11.18	7.62	8.89	6.20	5.59	2.16	2.03	0.914	0.457	1.27	1.14
20	13.72	7.62	11.43	6.20	5.59	2.16	2.03	0.914	0.457	1.27	1.14
Tol	± 0.254	± 0.381	± 0.254	± 0.381	± 0.127	± 0.127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

CIRCUIT SCHEMATICS

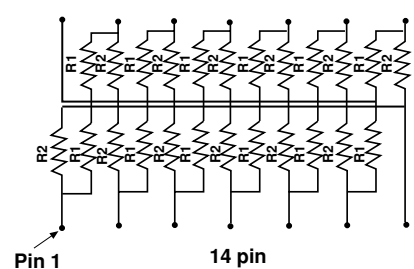
01 Circuit



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%