



Thick Film Resistor Networks, Dual-In-Line, Medium Body, Small Outline, Molded DIP, Surface Mount



FEATURES

 Isolated, bussed and dual terminator schematics available



- 14, 16 or 20 terminal package
- Molded case construction
- Thick film resistive elements
- Reflow solderable
- Compatible with automatic surface mounting equipment
- · Reduces total assembly costs
- For wave flow soldering contact factory
- Compliant to RoHS directive 2002/95/EC

STAND	STANDARD ELECTRICAL SPECIFICATIONS									
	POWER RATING							TOLERANCE (3) ± %	RESISTANCE RANGE	E-SERIES
GLOBAL MODEL	ELEMENT P _{70 °C} W	P _{70 °C}		CIRCUIT	MAXIMUM WORKING VOLTAGE (2) V _{DC}					
	VV	14	16	20		• 500				
SOMC	0.08 0.16 0.08	1.05 1.125 1.05	1.20 1.28 1.20	1.52 1.60 1.52	01 03 05	50	100	1, 2, 5 1, 2, 5 1, 2, 5	10 to 1M	24

Notes

DSCC has created series of drawings to support the need for a surface mount gull wing resistor network product. Vishay Dale is listed as a
resource on this drawing as follows:

DSCC			POWER RATING		RESISTANCE		TEMPERATURE	MAXIMUM	
DRAWING NUMBER	VISHAY DALE MODEL	CIRCUIT	ELEMENT P _{70 °C} W	PACKAGE P _{70 °C} W	RANGE Ω	TOLERANCE ± %	COEFFICIENT (0 °C to 70 °C) ± ppm/°C	WORKING VOLTAGE (2) V _{DC}	
87012	SOMC160116 SOMC160317 SOMC160548	01 (B) 03 (A) 05 (J)	0.08 0.16 0.08	1.20	10 to 2.2M	1, 2, 5	100, 300	50	
87013	SOMC14016 SOMC140313 SOMC140522	01 (B) 03 (A) 05 (J)	0.08 0.16 0.08	1.00	10 to 2.2M	1, 2, 5	100, 300	50	

These drawings can be viewed at: www.dscc.dla.mil/Programs/milSpec/ListDwgs.asp?DocType=DSCCdwg.

- · Power rating depends on the max. temperature at the solder point, the component placement density and the substrate material.
- Jumper: 0 Ω -resistor on request (100 m Ω).
- Packaging: According to EIA; see appropriate catalog or web page.
- (1) Temperature range: 55 °C to + 125 °C.
- (2) Continuous working voltage shall be $\sqrt{P \times R}$ or maximum working voltage, whichever is less.
- $^{(3)}$ ± 2 % standard, ± 1 % and ± 5 % available.

TECHNICAL SPECIFICATIONS								
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 (4)	V_{DC}	50						
Voltage coefficient	ppm/V	< 50						
Insulation voltage (1 min)	V _{DC/AC} peak	200						
Category temperature range	°C		- 55/+ 150					
Insulation resistance	Ω	> 10 ¹⁰						
TC tracking (- 55 °C to + 125 °C)	ppm/°C	50						

Note

(4) Rated voltage: $\sqrt{P \times R}$.

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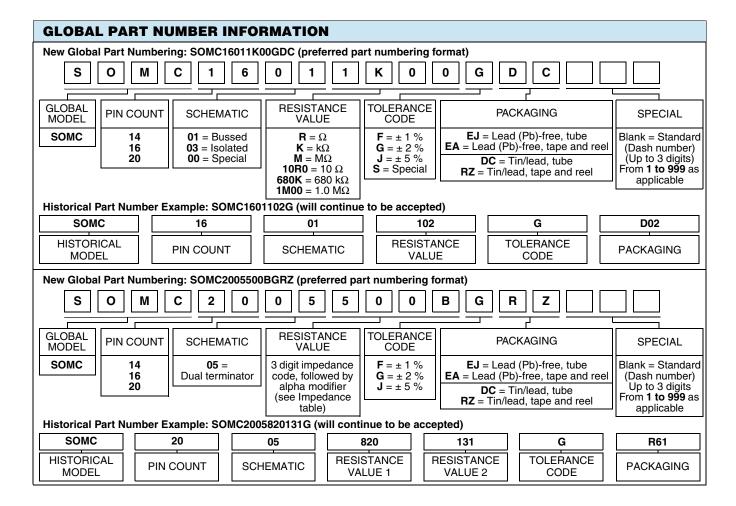
^{*} Pb containing terminations are not RoHS compliant, exemptions may apply

SOMC

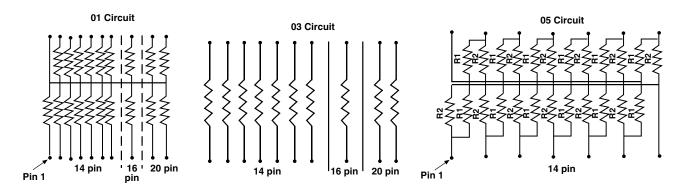
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CIRCUIT SCHEMATICS



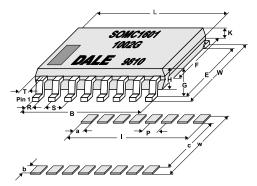




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DIMENSIONS



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		

Notes

- The dimension shown are for a 16 pin part. For parts with different pin numbers use the same pitch and add or subtract pads as required.
- Maximum solder reflow temperature + 255 °C.

DIMEN	DIMENSIONS in millimeters										
PIN NO#	L	W	В	E	F	G	Н	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	

IMPEDANCE CODES								
CODE	R ₁ (Ω)	R ₂ (Ω)	CODE	R ₁ (Ω)	R ₂ (Ω)			
500B	82	130	141A	270	270			
750B	120	200	181A	330	390			
800C	130	210	191A	330	470			
990A	160	260	221B	330	680			
101C	180	240	281B	560	560			
111C	180	270	381B	560	1.2K			
121B	180	390	501C	620	2.7K			
121C	220	270	102A	1.5K	3.3K			
131A	220	330	202B	3K	6.2K			

PERFORMANCE							
TEST	CONDITIONS OF TEST	TEST RESULTS (TYPICAL TEST LOTS)					
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 %					

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M8340108K3322FCD03 M8340108K4991FGD03 M8340108K6202GGD03 M8340109K2002FCD03 M8340109M4701GCD03 EXB
24N121JX EXB-24N330JX EXB-24N470JX EXB-A10E102J EXB-A10E104J 744C083101JTR EXB-U14360JX EXB-U18240JX EXB
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ACAS06S0830344P100 RM2012A-102/104-PBVW10 RM2012A-102503-PBVW10 RM2012A-502104-PBVW10 RM3216B-102302
PBVW10 L091S102LF ACAS06S0830341P100 ACAS06S0830342P100 ACAS06S0830345P100 EXB-14V300JX EXB-U14220JX EXB
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M8340102M4701JAD04 M8340105K1002GGD03 M8340105M1001JCD03