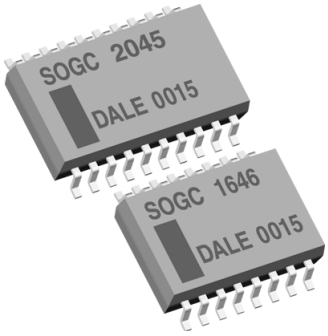
Thick Film Resistor Networks, Dual-In-Line Small Outline Molded Dip 45 & 46 Schematics



FEATURES

- 0.110" [2.79] maximum seated height
- Rugged, molded case construction
- 0.050" [1.27] lead spacing
- Reduces total assembly costs
- Compatible with automatic surface mounting equipment
- Uniform performance characteristics
- Meets EIA PDP 100, SOGN-0003 outline dimensions
- Available in tube pack or tape and reel pack
- Lead (Pb)-free version is RoHS compliant

Pb Available

e1 RoHS* COMPLIANT

STANDARD ELECTRICAL SPECIFICATIONS

GLOBAL MODEL	CIRCUIT SCHEMATIC	RESISTOR CIRCUIT W at 70 °C	PACKAGE POWER W at 70 °C	TOLERANCE ± %	RESISTANCE VALUES Ω	OPERATING VOLTAGE VDC	TEMPERATURE COEFFICIENT ± ppm/°C
SOGC16	45	0.1	1.6	2	180, 270, 820	50 max	100
	46	0.1	1.6	2	330, 150, 330	50 max	100
SOGC20	45	0.1	2.0	2	180, 270, 820	50 max	100
	46	0.1	2.0	2	330, 150, 330	50 max	100

TECHNICAL SPECIFICATIONS

PARAMETER	UNIT	S0GC16	SOGC20
Package Power Rating (Maximum at + 70 °C)	W	1.6	2.0
TCR Tracking (- 55 °C to + 125 °C)	ppm/°C	± 50	
Voltage Coefficient of Resistance	ppm/V	< 50 typical	
Maximum Operating Voltage	VDC	50	
Operating Temperature Range	°C	- 55 to + 125	
Storage Temperature Range	°C	- 55 to + 150	

MECHANICAL SPECIFICATIONS

Marking	Model number, schematic number, value, tolerance, pin 1 indicator, date code
Marking Resistance to Solvents	Permanency testing per MIL-STD-202, Method 215
Maximum Solder Reflow Temperature	+ 255 °C
Solderability	Per MIL-STD-202, Method 208E
Terminals	Copper alloy. Solder dipped terminal
Body	Molded epoxy

GLOBAL PART NUMBER INFORMATION

New Global Part Numbering: SOGC1646DC (preferred part numbering format)

S	O	G	C	1	6	4	6	D	C			

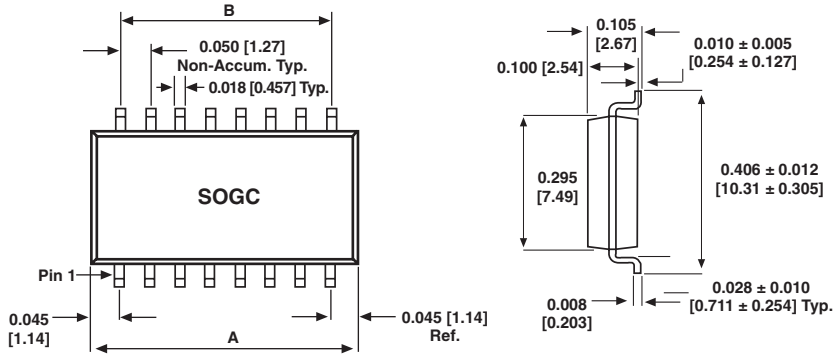
GLOBAL MODEL	PIN COUNT	SCHEMATIC	PACKAGING	SPECIAL
SOGC	**16** **20**	**45** = TTL/ECL Translator **46** = Signal Terminator	**EJ** = Lead (Pb)-free, Tube **EA** = Lead (Pb)-free, Tape & Reel **DC** = Tin/Lead, Tube **RZ** = Tin/Lead, Tape & Reel	Blank = Standard (Dash Number) (up to 3 digits) From **1-999** as applicable

Historical Part Number example: SOGC1646 (will continue to be accepted)

SOGC	16	46	D02
HISTORICAL MODEL	PIN COUNT	SCHEMATIC	PACKAGING

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

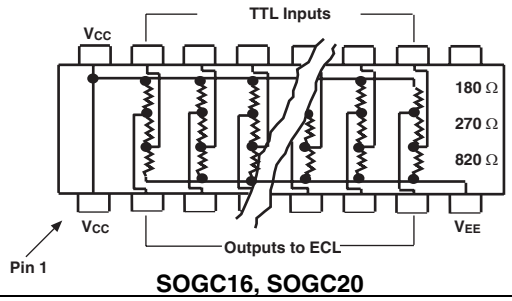
DIMENSIONS in inches [millimeters]



GLOBAL MODEL	A	B
SOGC16	0.440 [11.18]	0.350 [8.89]
SOGC20	0.540 [13.72]	0.450 [11.43]

CIRCUIT APPLICATIONS

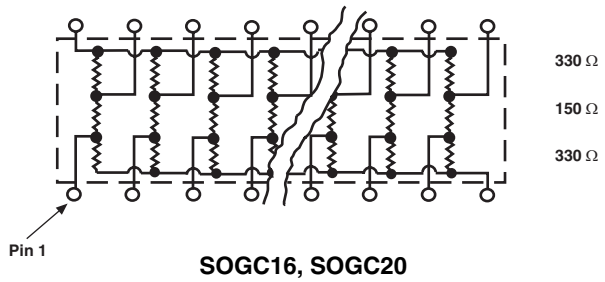
45 Schematic



SOGC16, SOGC20

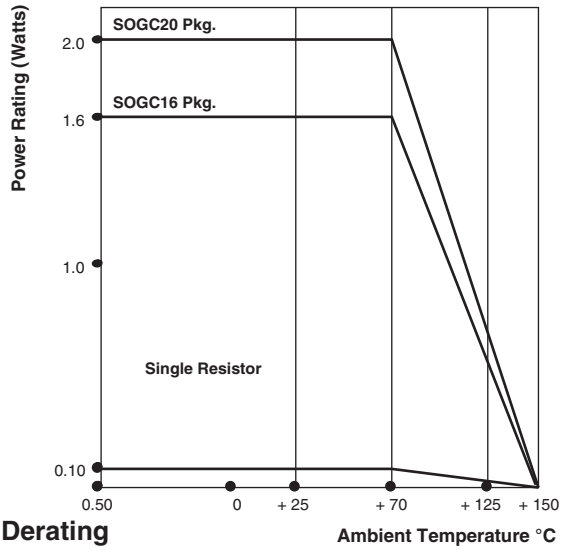
TTL to ECL translator
The SOGCxx45 network consists of resistors of 3 different values, internally divided into 6 or 8 identical three (3) resistor sections for TTL to ECL translation.

46 Schematic



SOGC16, SOGC20

SCSI-BUS signal terminator
The SOGCxx46 network consists of resistors of 2 different values, internally divided into 7 or 9 identical three (3) resistor sections for SCSI-BUS terminator applications.



PERFORMANCE

TEST	MAX. ΔR (TYPICAL TEST LOTS)
Power Conditioning	± 0.50 % ΔR
Thermal Shock	± 0.50 % ΔR
Short Time Overload	± 0.25 % ΔR
Low Temperature Operation	± 0.25 % ΔR
Moisture Resistance	± 0.50 % ΔR
Resistance to Soldering Heat	± 0.25 % ΔR
Shock	± 0.25 % ΔR
Vibration	± 0.25 % ΔR
Load Life	± 0.50 % ΔR
Terminal Strength	± 0.25 % ΔR
Insulation Resistance	10 000 MΩ (minimum)
Dielectric Withstanding Voltage	No evidence of arcing or damage (200 V RMS for 1 minute)

- Test methods per MIL-STD-202

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