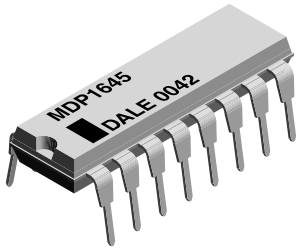
Thick Film Resistor Networks, Dual-In-Line, Molded DIP



FEATURES

- TTL/ECL translater and SCSI-BUS signal terminator schematics available
- 0.190" (4.83 mm) maximum seated height
- Rugged, molded case construction
- Low temperature coefficient (- 55 °C to + 125 °C),
  MDP 1645: ± 100 ppm/°C,
  MDP 1646: ± 250 ppm/°C
- Compatible with automatic insertion equipment
- Thick film resistive elements
- Reduces PC board space and reduces total assembly costs
- Available in tube pack
- Compliant to RoHS directive 2002/95 EC

Pb Available

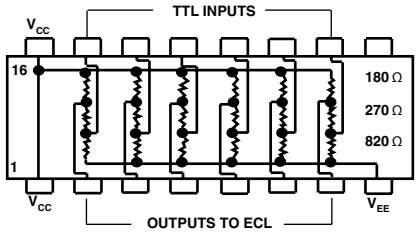
e1 RoHS* COMPLIANT

STANDARD ELECTRICAL SPECIFICATIONS

GLOBAL MODEL/ PIN NO.	POWER RATING		TOLERANCE ± %	TEMPERATURE COEFFICIENT (- 55 °C to + 125 °C) ± ppm/°C	TCR TRACKING ± ppm/°C	WEIGHT g
	ELEMENT $P_{70\ °C}$ W	PACKAGE $P_{70\ °C}$ W				
MDP1645	0.125	2.0	2	100 Typical	150	1.5
MDP1646	0.125	2.0	5	250 Typical	150	1.5

STANDARD ELECTRICAL SPECIFICATIONS

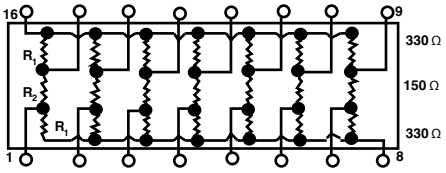
MDP1645 Schematic



TTL to ECL translator

The MDP1645 network consists of 18 resistors of 3 different values, internally divided into six (6) identical three (3) resistor sections for TTL to ECL translation.

MDP1646 Schematic



SCSI-BUS signal terminator

The MDP1646 network consists of 21 resistors of 2 different values, internally divided into seven (7) identical three (3) resistor sections for SCSI-BUS terminator applications.

GLOBAL PART NUMBER INFORMATION

New Global Part Numbering: MDP1646D04 (preferred part numbering format)

M	D	P	1	6	4	6	D	0	4			

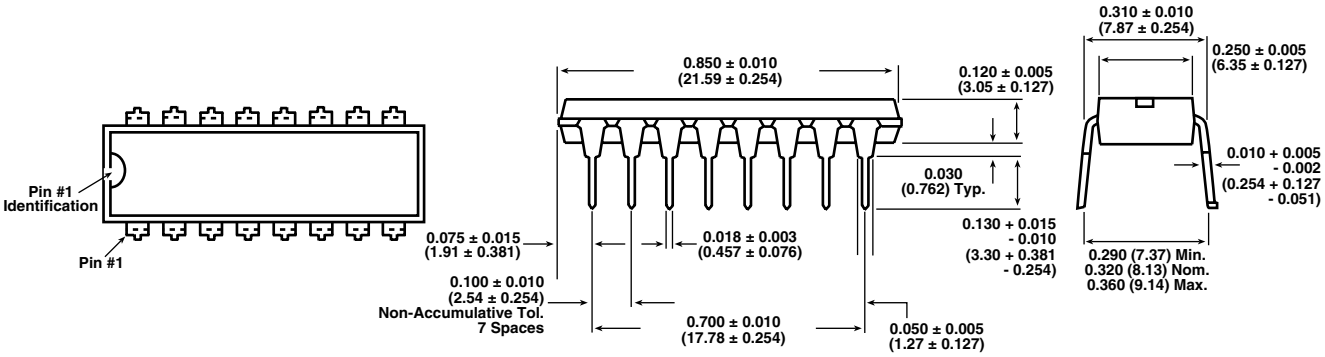
GLOBAL MODEL	PIN COUNT	SCHEMATIC	PACKAGING	SPECIAL
MDP	**16**	**45** = TTL/ECL translator **46** = Signal terminator	**E04** = Lead (Pb)-free, tube **D04** = Tin/lead,tube	Blank = Standard (Dash Number) (Up to 3 digits) From **1to 999** as applicable

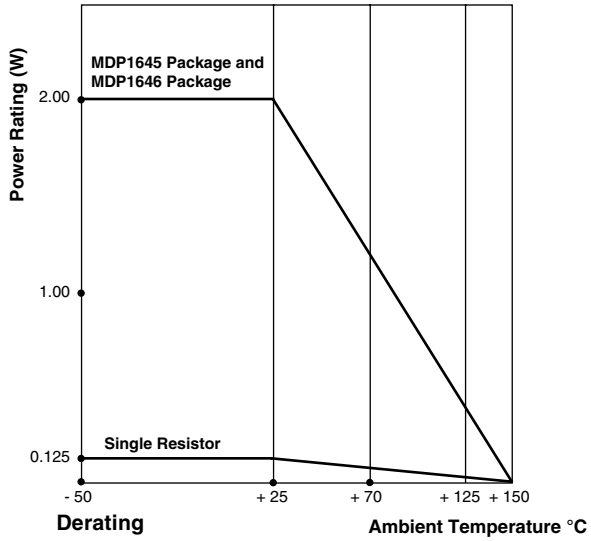
Historical Part Number: MDP1646 (will continue to be accepted)

MDP	16	46	D04
HISTORICAL MODEL	PIN COUNT	SCHEMATIC	PACKAGING

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

DIMENSIONS in inches (millimeters)





TECHNICAL SPECIFICATIONS		
PARAMETER	**UNIT**	**MDP Series**
Maximum Operating Voltage	V_{DC}	100
Voltage Coefficient of Resistance (Typical)	V_{eff}	< 50 ppm/°C
Operating Temperature Range	°C	- 55 to + 125
Storage Temperature Range	°C	- 55 to + 150

MECHANICAL SPECIFICATIONS	
Marking Resistance to solvents	Permanency testing per MIL-STD-202, method 215
Solderability	Per MIL-STD-202, method 208E
Terminals	Copper alloy, solder plated
Body	Molded epoxy
Weight	1.5 g

PERFORMANCE		
TEST	**CONDITIONS**	**MAX. ΔR (TYPICAL TEST LOTS)**
Thermal Shock	5 cycles between - 65 °C and + 125 °C	± 0.50 % ΔR
Short Time Overload	2.5 x rated working voltage 5 s	± 0.25 % ΔR
Low Temperature Operation	45 min at full rated working voltage at - 65 °C	± 0.25 % ΔR
Moisture Resistance	240 h with humidity ranging from 80 % RH to 98 % RH	± 0.50 % ΔR
Resistance to Soldering Heat	Leads immersed in + 260 °C solder to within 1/16" of body for 10 s	± 0.25 % ΔR
Shock	Total of 18 shocks at 100 *g*'s	± 0.25 % ΔR
Vibration	12 h at maximum of 20 *g*'s between 10 Hz and 2000 Hz	± 0.2 5% ΔR
Load Life	1000 h at + 70 °C, rated power applied 1.5 h "ON", 0.5 h "OFF" for full 1000 h period. Derated according to the curve.	± 0.50 % ΔR
Terminal Strength	4 1/2 pound pull for 30 s	± 0.25 % ΔR
Insulation Resistance	10 000 MΩ (minimum)	-
Dielectric Withstanding Voltage	No evidence of arcing or damage (200 V_{RMS} for 1 min)	-

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