



DIONICS INC.

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 WESTBURY, NEW YORK 11590
 (516) 997-7474 TWX 510-222-0974

DI-603A DI-803A
DI-604A DI-804A
DI-605A DI-805A

T-52-13-09

DI603A DI604A DI605A
DI803A DI804A DI805A

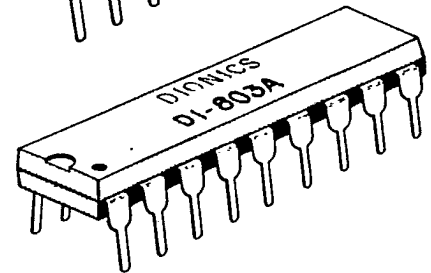
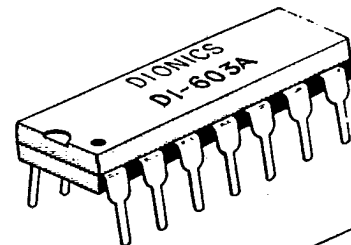
The Dionics DI603A/DI803A series of anode drive circuits are designed for interfacing between MOS or TTL circuitry and gas discharge display panels. The drivers are arrayed in groups of 6 or 8 lines with split V+ rails to allow multiplexing between display anodes.

FEATURES:

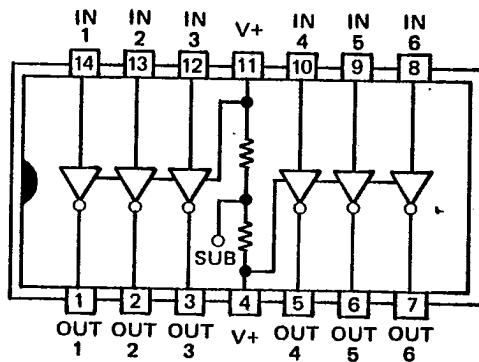
- 75V, 100V, 125V DRIVERS
- MOS and TTL COMPATIBILITY
- 6 AND 8 LINE VERSIONS
- RELIABLE DIELECTRIC ISOLATION PROCESS

HIGH VOLTAGE

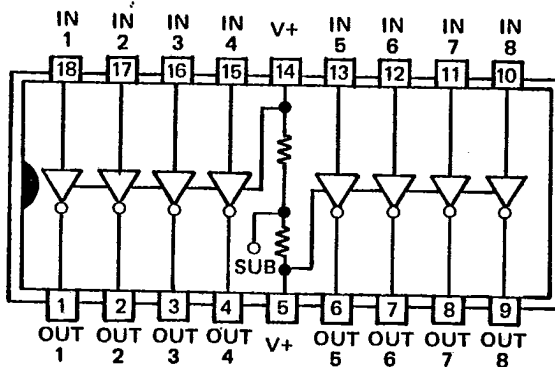
MONOLITHIC SILICON
 DIELECTRICALLY ISOLATED
 INTEGRATED CIRCUITS



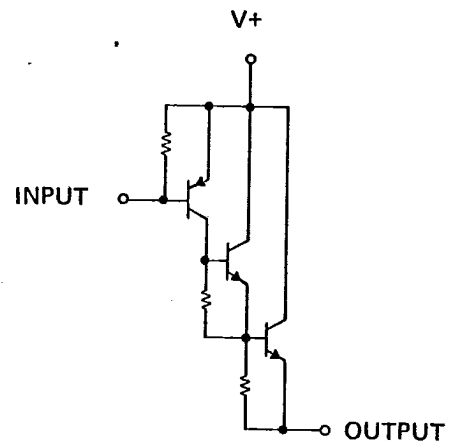
DI603A
DI604A
DI605A



DI803A
DI804A
DI805A



PIN CONNECTIONS



CIRCUIT SCHEMATIC
 (EACH SECTION)

DI-603A, DI-604A, DI-605A, DI-803A, DI-804A, DI-805A

T-52-13-09

ABSOLUTE MAXIMUM RATINGS (T_A = 25°C)

| CHARACTERISTICS | SYMBOL | NOTES | LIMITS | | | UNITS |
|--|---------------------------|-------|--------------------|--------------------|--------------------|---------|
| | | | DI-603A DI-803A | DI-604A DI-804A | DI-605A DI-805A | |
| Output Voltage | V _O (MAX) | 1 | 125 | 100 | 75 | V. |
| Input Current | I _{IN} (MAX) | | 10 | 10 | 10 | mA |
| Output Current | I _O (MAX) | | 20 | 20 | 20 | mA |
| Power Dissipation DI-603A, DI-604A, DI-605A | P _D (MAX) | 2 | 600 | | | mW |
| | DI-803A, DI-804A, DI-805A | 3 | | | | |
| Storage Temperature | T _S | | -55 to +125 | | | °C |
| Operating Temperature | T _O | | | | | 0 to 70 |

ELECTRICAL CHARACTERISTICS (T_A = 25°C)

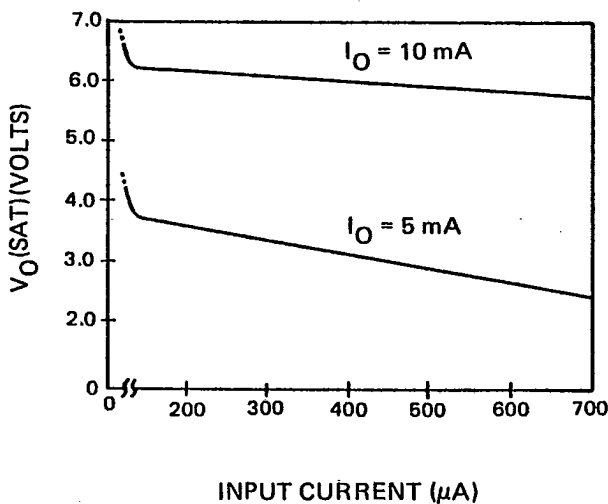
| PARAMETER | SYMBOL | NOTES | CONDITION | MIN | TYP | MAX | UNITS |
|--------------------------------|----------------------|-------|---|--------------------|-----|-----|-------|
| Output Saturation Voltage | V _O (SAT) | 1 | I _O = 10 mA. I _{IN} = 400μA | | 6.0 | 10 | V. |
| Output Leakage DI-603A DI-803A | I _O (OFF) | | V _O = 125 V | All inputs open | 1.0 | 10 | μA |
| Output Leakage DI-604A DI-804A | I _O (OFF) | | V _O = 100V | | 1.0 | 10 | μA |
| Output Leakage DI-605A DI-805A | I _O (OFF) | | V _O = 75 V | | 1.0 | 10 | μA |

NOTES:

1. Measured with respect to V+ terminal. (Absolute values are shown.)
2. Derate DI-603A, DI-604A, DI-605A at 6 mW/°C about 25°C ambient
3. Derate DI-803A, DI-804A, DI-805A at 8 mW/°C above 25°C ambient

TYPICAL PERFORMANCE

CONTROL CHARACTERISTICS



OUTPUT CHARACTERISTICS

