



DIONICS INC.

65 RUSHMORE STREET
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

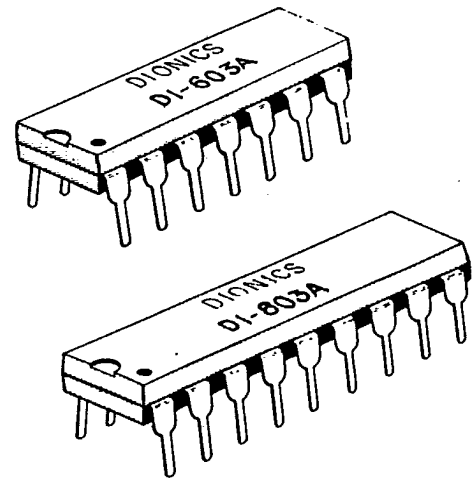
The Dionics DI603A/DI803A series of anode drive circuits are designed for interfacing between MOS or TTL circuitry and gas discharge display panels. The drivers are arrayed in groups of 6 or 8 lines with split V+ rails to allow multiplexing between display anodes.

FEATURES:

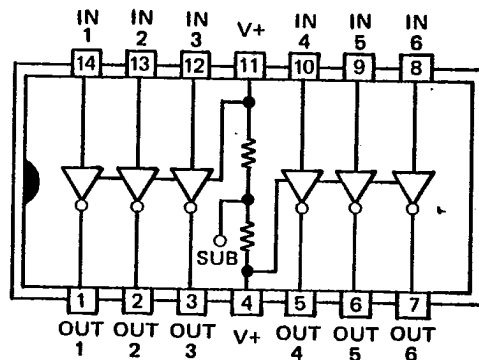
- 75V, 100V, 125V DRIVERS
- MOS and TTL COMPATIBILITY
- 6 AND 8 LINE VERSIONS
- RELIABLE DIELECTRIC ISOLATION PROCESS

HIGH VOLTAGE

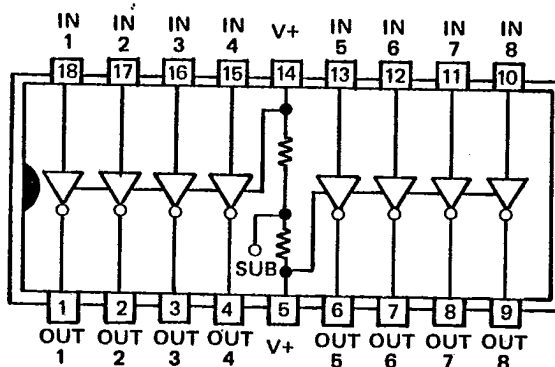
MONOLITHIC SILICON
DIELECTRICALLY ISOLATED
INTEGRATED CIRCUITS



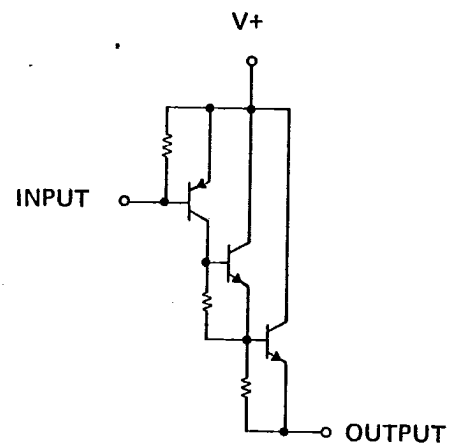
DI603A
DI604A
DI605A



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 ($T_A = 25^\circ\text{C}$)

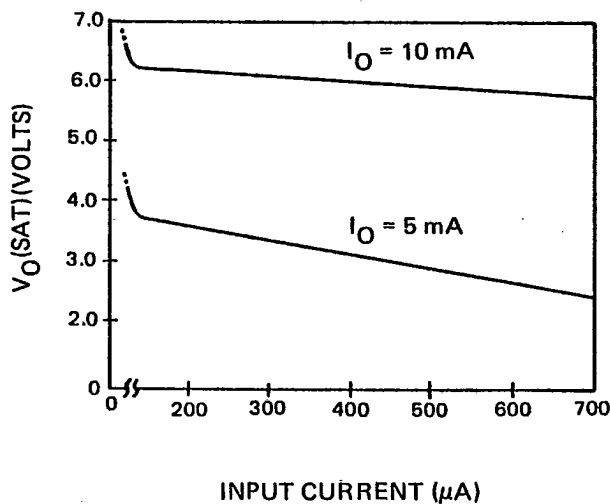
CHARACTERISTICS	SYMBOL	NOTES	LIMITS			UNITS
			DI-603A DI-803A	DI-604A DI-804A	DI-605A DI-805A	
Output Voltage	V_O (MAX)	1	125	100	75	V.
Input Current	I_{IN} (MAX)		10	10	10	mA
Output Current	I_O (MAX)		20	20	20	mA
Power Dissipation						
DI-603A, DI-604A, DI-605A	P_D (MAX)	2	600			mW
DI-803A, DI-804A, DI-805A	P_D (MAX)	3	800			mW
Storage Temperature	T_S		-55 to +125			$^\circ\text{C}$
Operating Temperature	T_O		0 to 70			$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$)

PARAMETER	SYMBOL	NOTES	CONDITION	MIN	TYP	MAX	UNITS
Output Saturation Voltage	V_O (SAT)	1	$I_O = 10\text{ mA}$, $I_{IN} = 400\mu\text{A}$		6.0	10	V.
Output Leakage DI-603A DI-803A	I_O (OFF)		$V_O = 125\text{ V}$		1.0	10	μA
Output Leakage DI-604A DI-804A	I_O (OFF)		$V_O = 100\text{ V}$		1.0	10	μA
Output Leakage DI-605A DI-805A	I_O (OFF)		$V_O = 75\text{ V}$		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/ $^\circ\text{C}$ about 25 $^\circ\text{C}$ ambient
3. Derate DI-803A, DI-804A, DI-805A at 8 mW/ $^\circ\text{C}$ above 25 $^\circ\text{C}$ ambient

TYPICAL PERFORMANCE**CONTROL CHARACTERISTICS****OUTPUT CHARACTERISTICS**