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GAS DISCHARGE DISPLAY SEGMENT DRIVERS

DI-232

DI-242

General Description:

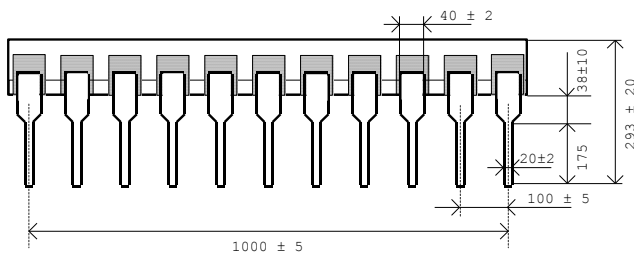
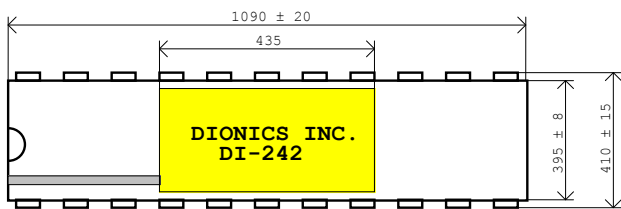
The DIONICS DI-232 and DI-242 circuits are designed to drive gas discharge display devices from signals originating from MOS or TTL circuitry. Each output is a switched programmable constant current sink with a voltage compliance of 80 Volts or 125 Volts.

These circuits provide for simple interface with display such as Beckman, SP-452, Cherry W410-1051 or Dale PD-16A040.

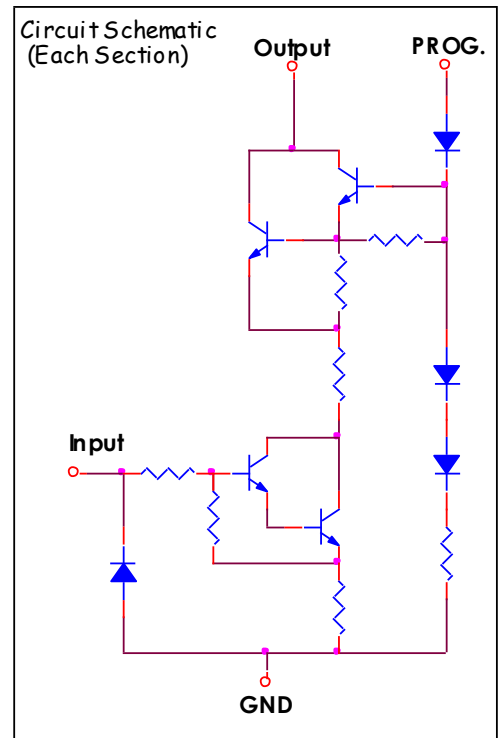
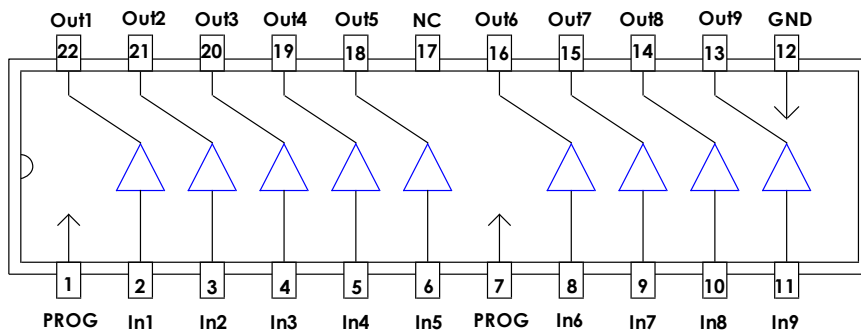
Features:

- ✓ High Breakdown Voltage: 80V or 125V.
- ✓ High Input Voltage Capability: 40V
- ✓ TTL or MOS Compatible
- ✓ Each Output Programmed by a Single Resistor
- ✓ Requires Few Additional Components
- ✓ Dielectrically Isolated Integrated Circuits
- ✓ DC Restoring Input Diode

Package Layout:



Pin Connections



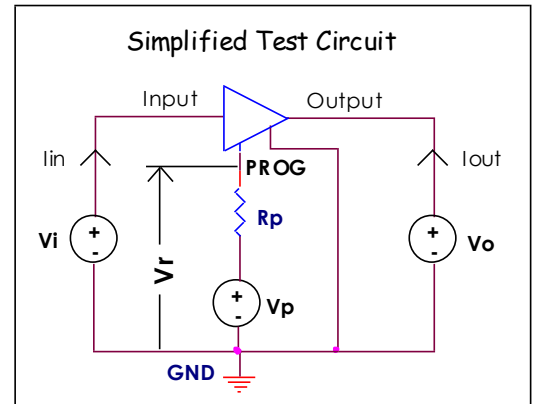
Absolute Maximum Rating (Ta = 25 °C)

Characteristic	Symbol	Notes	Limits	Units
Input Voltage	V _{in}	Measured With Respect to GND Terminal	40	V
Output Current	I _o		5	mA
Output Voltage DI-232	V _o	Measured With Respect to GND Terminal	80	V
Output Voltage DI-242	V _o	Measured With Respect to GND Terminal	125	V
Power Dissipation DI-232; DI-242	P _D	Derate at 8 mW/ °C Above 25 °C Ambient	1100	mW
Storage Temperature	T _s		-55 to +125	°C
Operating Temperature	T _o		0 to +70	°C

Electrical Characteristics (Ta = 25 °C)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Output Saturation Voltage	V _o (SAT)	I _o =1mA; V _i =3.5V; R _p =27kΩ; V _p =10V		5		V
Output Leakage Current	I _o (OFF)	V _o = Rated Voltage; V _i = 0.4V; R _p = 27kΩ; V _p = 10V		0.1	10	μA
Output Current Match	ΔI _o / I _o	V _o =60V; V _i =3.5V; R _p =27kΩ; V _p =10V		± 5	± 10	%
Output Current	I _o (ON)	V _o =60V; V _i =3.5V; R _p =27kΩ; V _p =10V	1.1	1.2	1.5	mA
Input Current	I _i	V _i = 7.0V	250	370	500	μA

Typical Application:



V_p: PROGRAM VOLTAGE
R_p: PROGRAM RESISTOR

