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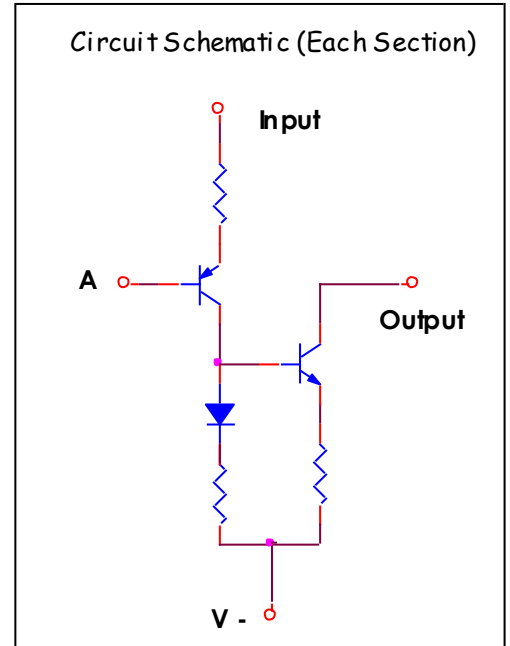
DI-302 LEVEL-SHIFTED GAS DISCHARGE DISPLAY SEGMENT DRIVER

General Description:

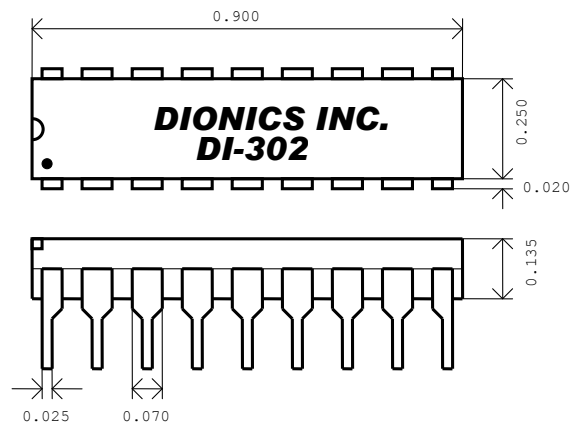
The DIONICS DI-302 is designed to drive gas discharge digital display devices from signals developed in MOS or TTL circuitry. Each output constitutes a switched constant current sink with a compliance of up to 100V. This output level can absorb large fluctuation of supply voltage. The signal is boosted in level by up to 125V. This eases interfacing between logic circuitry and display, thus reduces costs.

Features:

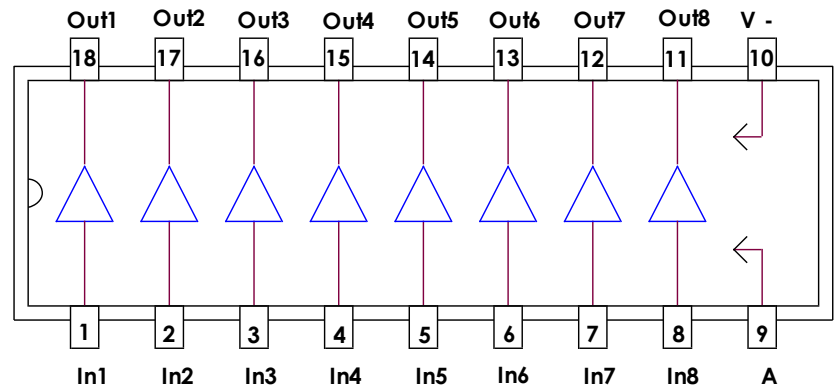
- ✓ Monolithic Silicon Dielectrically Isolated Integrated Circuit
- ✓ Programmable Constant Current Output
- ✓ Current Output Range: 0.1 - 2.5mA
- ✓ 125 Volt Operation
- ✓ Plastic 18-Pin DIP Package
- ✓ Level Shifted For Ease Of Use
- ✓ MOS and TTL Compatibility
- ✓ Eight-Channel Operation
- ✓ Pin For Pin Replacement for
Sprague UDN 7183A, UDN 7184A or UDN 7186A



Package Layout:



Pin Connections



Absolute Maximum Rating (Ta = 25 °C)				
Characteristic	Symbol	Notes	Limits	Units
Supply Voltage	V -	Measured With Respect to Terminal "A"	-125	V
Input Voltage	V _{in}	Measured With Respect to Other Terminal	± 20	V
Input Voltage	V _{IA}	Measured With Respect to Terminal "A"	20	V
Output Voltage	V _o	Measured With Respect to V -	100	V
Output Current	I _o		2.5	mA
Power Dissipation	P _D	Derate at 8 mW/ °C Above 25 °C Ambient	800	mW
Storage Temperature	T _s		-55 to +125	°C
Operating Temperature*	T _o		0 to +70	°C

* Ceramic (-20 °C to +85 °C)

Electrical Characteristics (Ta = 25 °C)						
Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Output Saturation Voltage	V _o (SAT)	I _o = 1mA; V _s = 100V		15		V
Output Leakage Current	I _o (OFF)	V _s = 125V; V _o = 100V; V _{IA} = 0V		1	10	μA
Output Current Match	ΔI _o / I _o	V _s = 100V; V _o = 60V; V _{IA} = 1.2V		± 10	± 20	%
Output Current	I _o (ON)	V _s = 100V; V _o = 60V; V _{IA} = 1.2V	0.5	0.85	1.2	mA

Typical Application:

