

T-52-13-45

IR2402 10-Digit Printer Driver

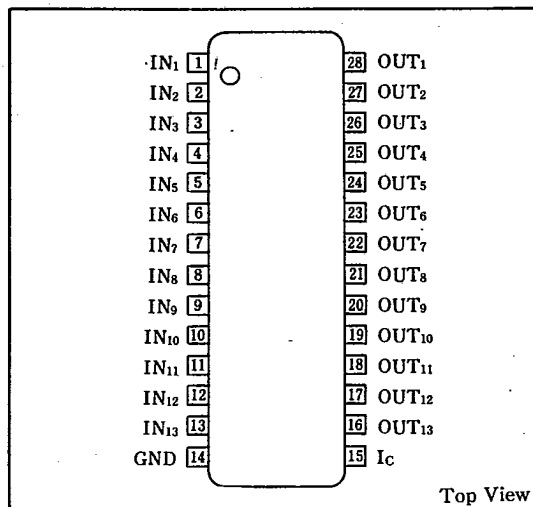
Description

The IR2402 is a magnet driver for a 10-digit microprinter. It consists of a 12-circuit printer driver with strobe and a 1-circuit ribbon shift driver.

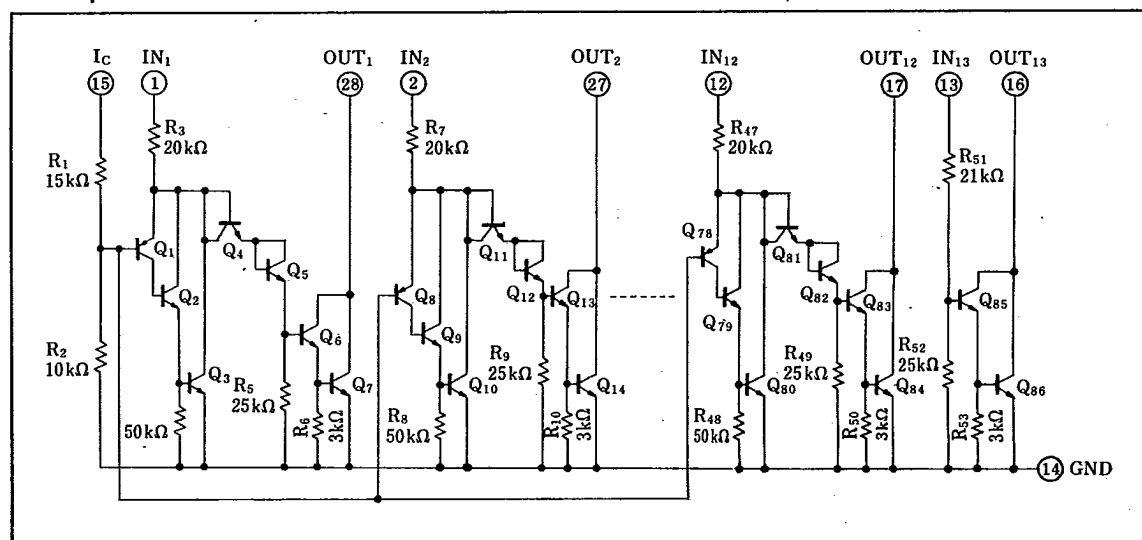
Features

1. High output current, $I_{OUT}=400\text{mA}$ (MAX.)
2. High output breakdown voltage
 $BV_{CEO}=30\text{V}$ (MAX.)
3. Directly driven by MOS output
4. Darlington construction
5. 28-pin dual-in-line package

Pin Connections



Equivalent Circuit



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Absolute Maximum Ratings

Parameter	Symbol	Condition	Rating	Unit
Supply voltage	V_{CC}		30	V
Output current*	I_{OUT}	Each circuit	400	mA
Input voltage	V_{IN}		-0.5 ~ +40	V
Breakdown voltage between collector-emitter	BV_{CEO}		30	V
Power dissipation	P_D	$T_a \leq 25^\circ\text{C}$	800	mW
P_D derating ratio	$\Delta P_D/^\circ\text{C}$	$T_a > 25^\circ\text{C}$	7	mW/°C
Operating temperature	T_{opr}		0 ~ +60	°C
Storage temperature	T_{stg}		-40 ~ +100	°C

* Duty cycle 50% or less, repetitive frequency 1Hz or more.

Recommended Operating Conditions

Parameter	Symbol	Condition	Rating	Unit
Output voltage	V_{OM}		30 or less	V
Operating temperature	T_{opr}		0 ~ +60	°C
Output current	I_{OUT}	at 5% duty	0 ~ 400	mA
		at 18% duty	0 ~ 200	

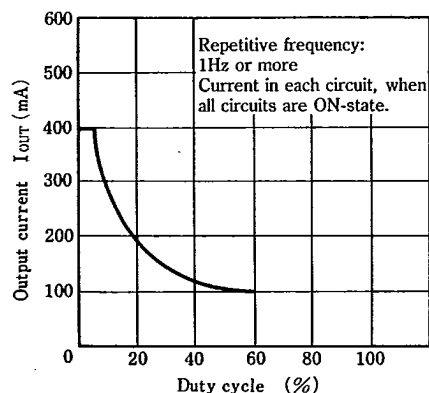
Electrical Characteristics

($T_a = 0 \sim +60^\circ\text{C}$)

Parameter	Symbol	Condition	MIN.	TYP.	MAX.	Unit
Supply voltage	V_{CC}				30	V
Control input voltage	$V_{IC\ ON}$			7.5	10	V
ON-state input current	$I_{I\ ON}$	$V_{IN} = 17\text{V}$, $I_{OUT} = 0\text{mA}$			1.3	mA
ON-state output voltage	$V_{O\ ON1}$	$I_{OUT} = 400\text{mA}$ (Each circuit), $V_{IN} = 13\text{V}$			2.5	V
	$V_{O\ ON2}$	$I_{OUT} = 200\text{mA}$ (Each circuit), $V_{IN} = 13\text{V}$			1.5	
OFF-state output current	$I_{O\ OFF}$	$V_{OUT} = 25\text{V}$, Input open			100	μA

Electrical Characteristic Curve

Output current—Duty cycle Characteristics



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