T-43-25

IR2C30/IR2C30N 7-Unit 120mA Transistor Array

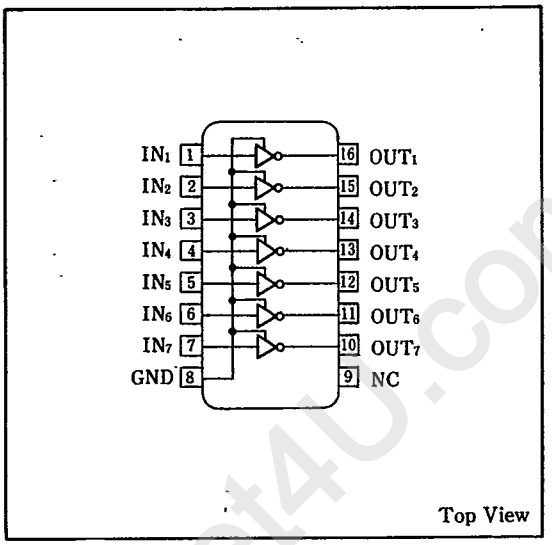
Description

The IR2C30/IR2C30N is a 7-circuit driver. It can be directly driven by CMOS LSI.

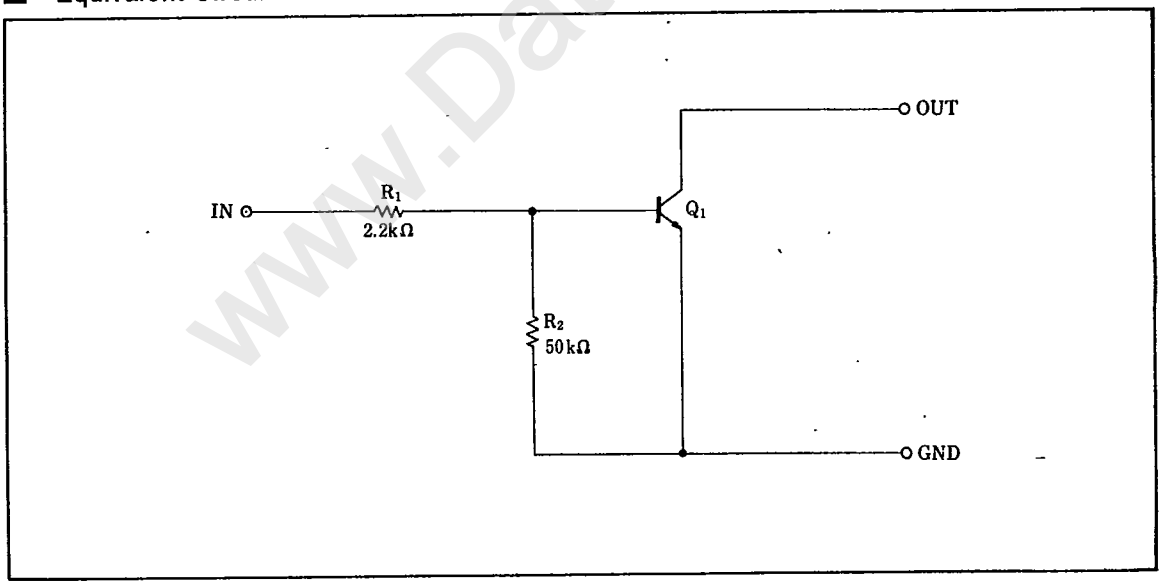
Features

1. Output breakdown voltage BV_{CEO}=20V (MAX.)
2. Output current capability I_{OUT}=120mA (MAX.)
3. Low input current
4. Directly driven by MOS output
5. 16-pin dual-in-line package (IR2C30)
   16-pin small-outline package (IR2C30N)

Pin Connections



Equivalent Circuit



■ Absolute Maximum Ratings

Parameter	Symbol	Condition		Rating	Unit
Output breakdown voltage	BV_{CEO}			20	V
Output current	I_{OUT}			120	mA
Input voltage	V_{IN}			0~10	V
Power dissipation	P_D	Ta≦25℃	IR2C30	950	mW
			IR2C30N	500	
P_D derating ratio	ΔP_D/℃	Ta>25℃	IR2C30	9.5	mW/℃
			IR2C30N	4	
Operating temperature	T_{opr}			−20~+85	℃
Storage temperature	T_{stg}			−55~+150	℃

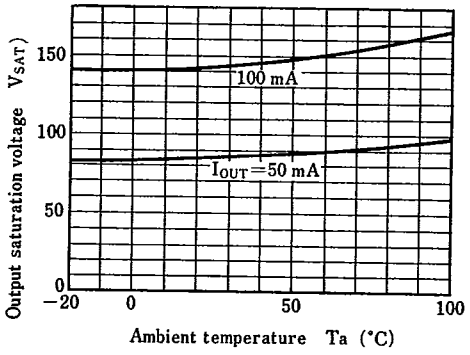
■ Electrical Characteristics

(Ta=−20~+85℃)

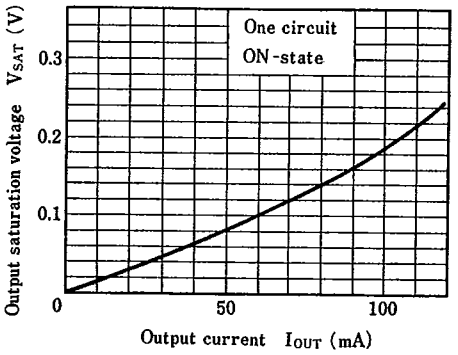
Parameter	Symbol	Condition	MIN.	TYP.	MAX.	Unit
OFF-state output current	$I_{O\ OFF}$	V_{OUT}=20V, V_{IN}=0.2V			10	μA
ON-state output voltage	$V_{O\ ON}$	I_{OUT}=50mA		0.1	0.3	V
		I_{OUT}=100mA		0.2	0.5	
Input "High" voltage	V_{IH}	I_{OUT}=50mA, V_{OUT}=0.3V	2.3			V
		I_{OUT}=100mA, V_{OUT}=0.5V	2.9			
Input "Low" voltage	V_{IL}				0.2	V
Input "High" current	I_{IH}	V_{IN}=2.5V, I_{OUT}=100mA	0.55		1.2	mA
		V_{IN}=4.3V, I_{OUT}=100mA	1.1		2.3	

■ Electrical Characteristic Curves

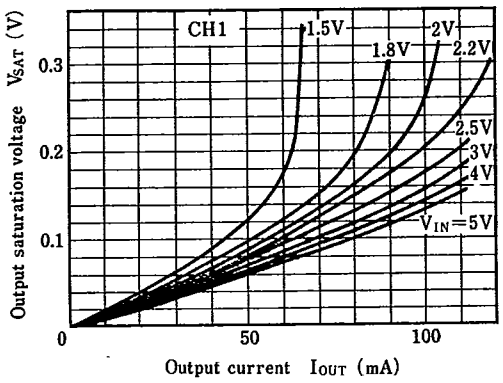
Output saturation voltage—Ambient temperature Characteristics



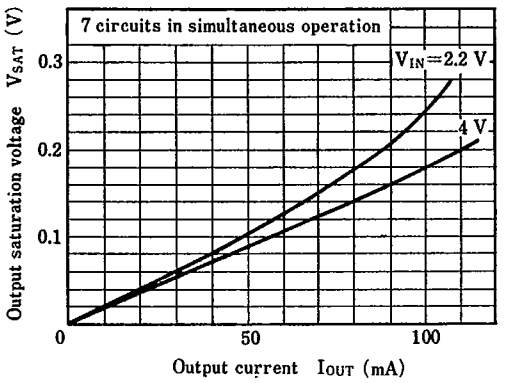
Output saturation voltage—Output current Characteristics



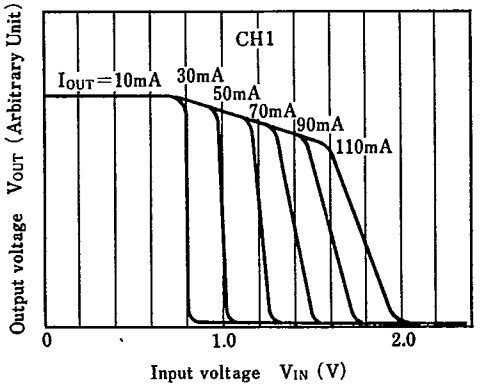
Output saturation voltage—Output current Characteristics



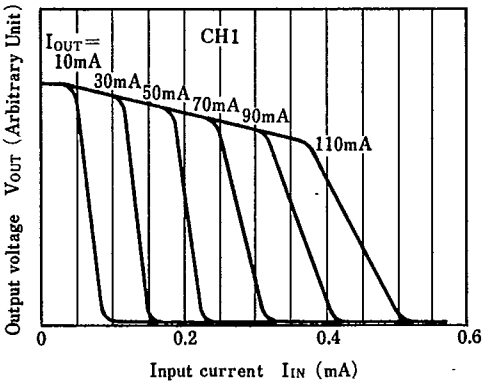
Output saturation voltage—Output current Characteristics



Output voltage—Input voltage Characteristics



Output voltage—Input current Characteristics



Output saturation voltage—Input voltage Characteristics