IR2C33 7-Unit 60mA Transistor Array

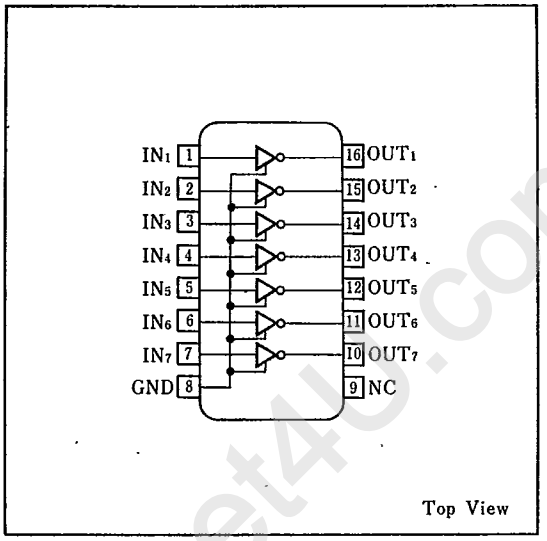
Description

The IR2C33 is a 7-circuit driver.

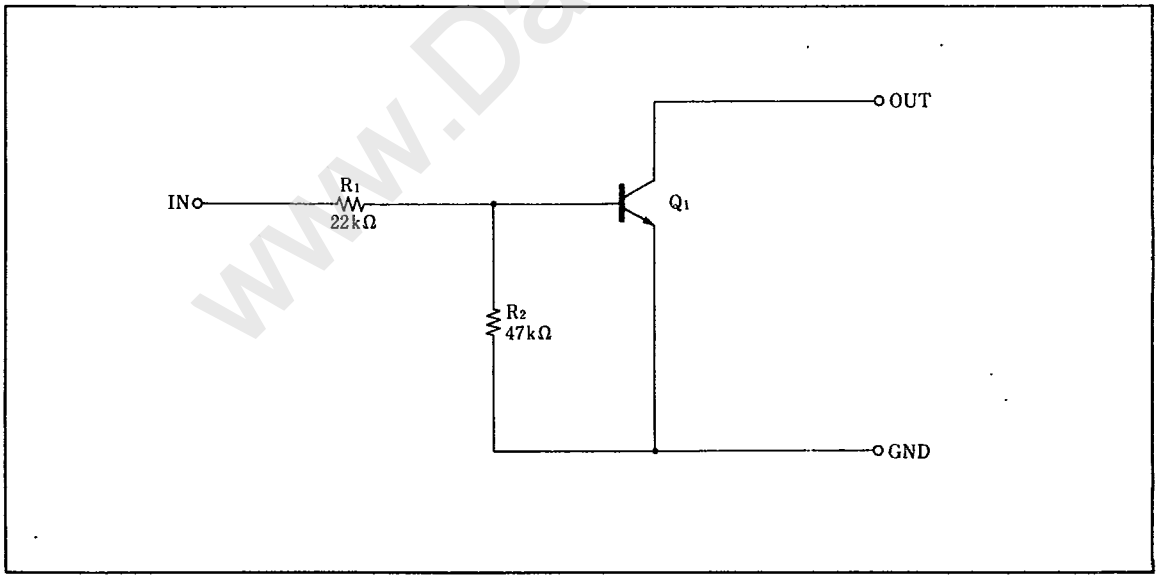
Features

1. Output breakdown voltage BV_{CEO}=20V (MAX.)
2. Output current capability I_{OUT}=60mA (MAX.)
3. 16-pin dual-in-line package

Pin Connections



Equivalent Circuit



■ Absolute Maximum Ratings

(Ta=25℃)

Parameter	Symbol	Condition	Rating	Unit
Input voltage	V_{IN}		0~25	V
Output breakdown voltage	BV_{CEO}		20	V
Output current	I_{OUT}		60	mA
Power dissipation	P_D	Ta≦25℃	950	mW
P_D derating ratio	ΔP_D/℃	Ta>25℃	9.5	mW/℃
Operating temperature	T_{opr}		−20~+85	℃
Storage temperature	T_{stg}		−55~+150	℃

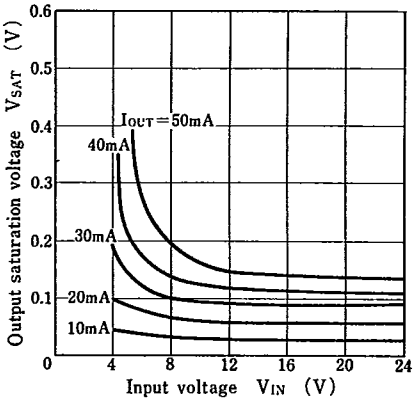
■ Electrical Characteristics

(Ta=−20~+85℃)

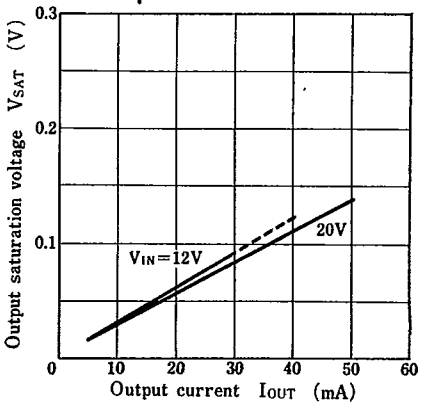
Parameter	Symbol	Condition	MIN.	TYP.	MAX.	Unit
OFF-state output current	$I_{O\ OFF}$	V_{CEO}=20V, V_{IN}=0.2V			10	μA
ON-state output current	$V_{O\ ON}$	I_{OUT}=50mA, V_{IN}=20V		0.12	0.5	V
		I_{OUT}=30mA, V_{IN}=12V		0.08	0.3	
Input current	I_{IN}	V_{IN}=20V		0.9	1.8	mA
		V_{IN}=12V		0.5	1	
Input "High" voltage	V_{IH}	I_{OUT}=50mA, V_{CEO}=0.5V	20			V
		I_{OUT}=30mA, V_{CEO}=0.3V	12			
Input "Low" voltage	V_{IL}				0.2	V

■ Electrical Characteristic Curves (Unless otherwise specified, Ta=25℃)

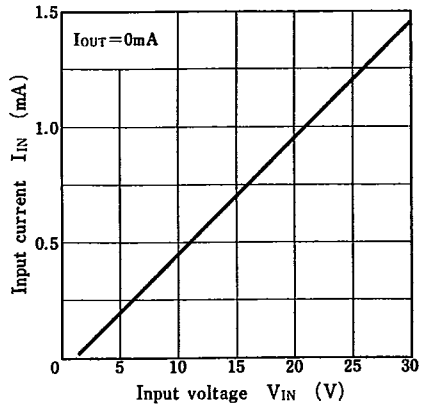
Output saturation voltage— Input voltage Characteristics



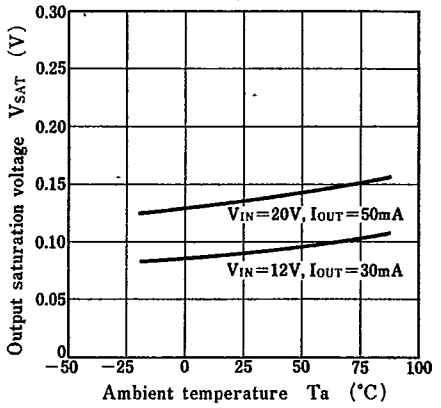
Output saturation voltage— Output current Characteristics



Input current—Input voltage Characteristics



Output saturation voltage—Ambient temperature Characteristics



Input current—Ambient temperature Characteristics