

7-Unit 60mA Transistor Array

IR2C33

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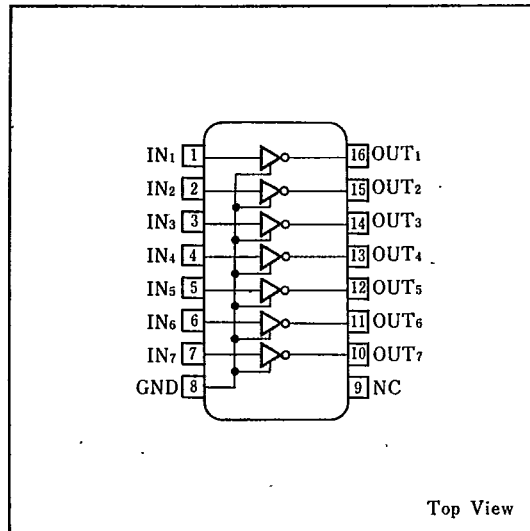
Description

The IR2C33 is a 7-circuit driver.

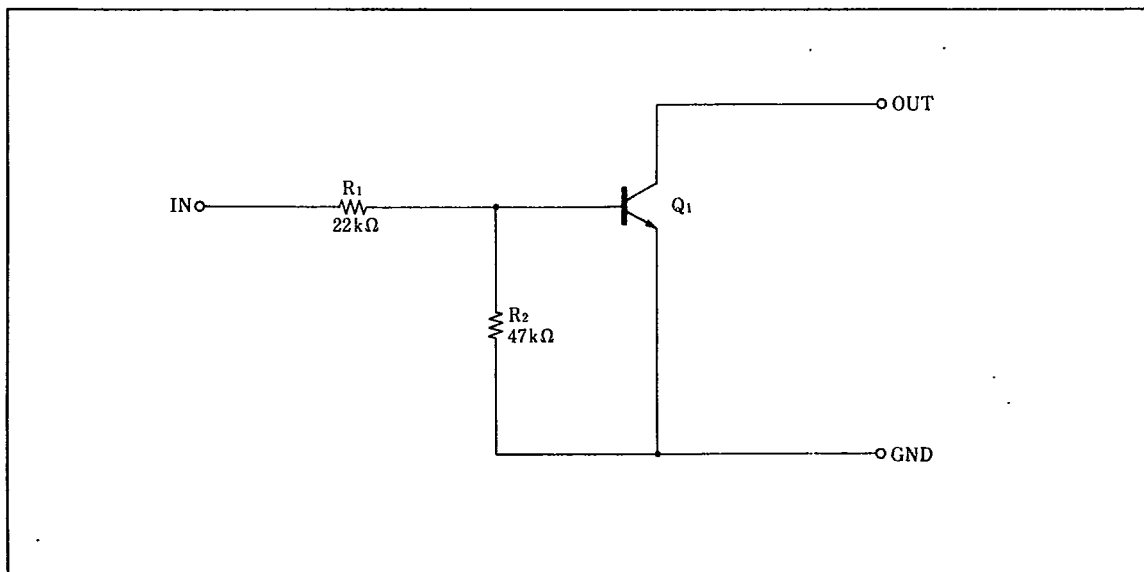
Features

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



SHARP

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Absolute Maximum Ratings

(Ta=25°C)

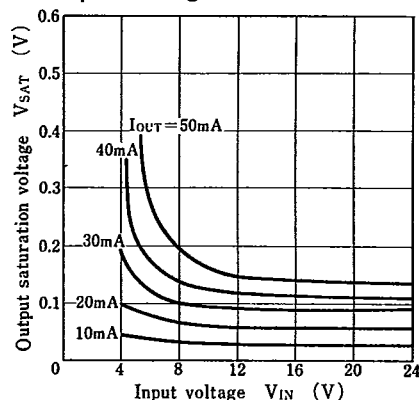
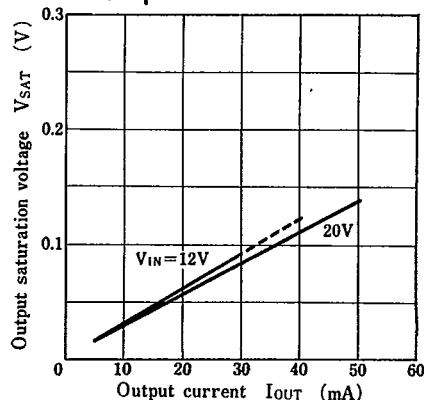
Parameter	Symbol	Condition	Rating	Unit
Input voltage	V_{IN}		0~25	V
Output breakdown voltage	BV_{CEO}		20	V
Output current	I_{OUT}		60	mA
Power dissipation	P_D	$T_a \leq 25^\circ\text{C}$	950	mW
P_D derating ratio	$\Delta P_D/^\circ\text{C}$	$T_a > 25^\circ\text{C}$	9.5	mW/°C
Operating temperature	T_{opr}		-20~+85	°C
Storage temperature	T_{stg}		-55~+150	°C

Electrical Characteristics

(Ta=-20~+85°C)

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

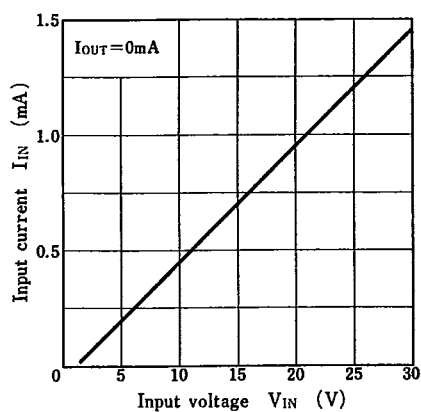
Electrical Characteristic Curves (Unless otherwise specified, Ta=25°C)

Output saturation voltage—
Input voltage CharacteristicsOutput saturation voltage—
Output current Characteristics

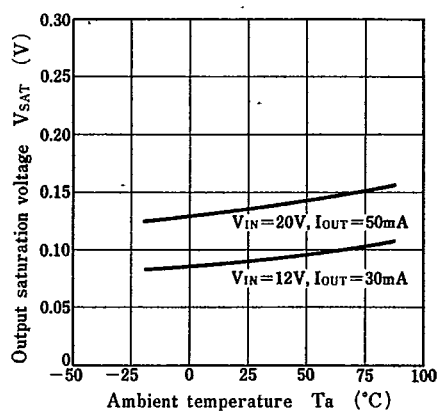
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Input current—Input voltage
Characteristics



Output saturation voltage—
Ambient temperature Characteristics



Input current—Ambient temperature
Characteristics

