

# LB1641

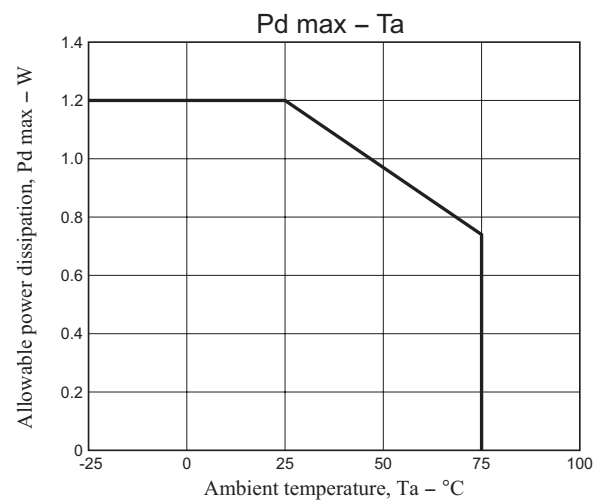
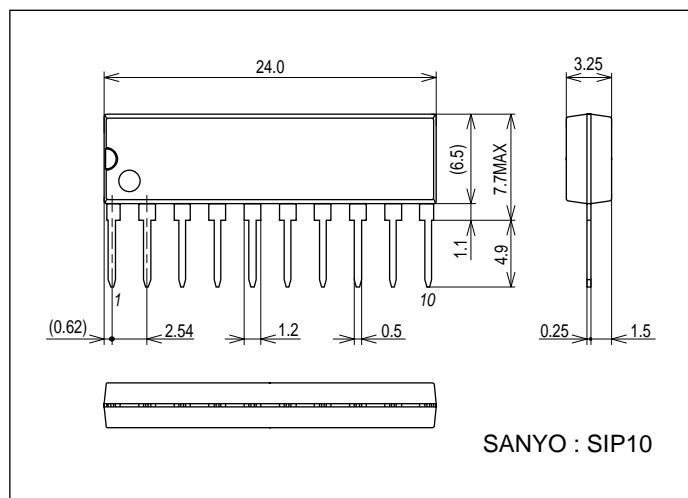
## Electrical Characteristics at $T_a = 25^\circ\text{C}$ , $V_{CC} = 12\text{V}$

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Input threshold voltage	$V_{th}$	$R_L = \infty$	1.1	1.3	1.5	V
Minimum input on-state current	$I_{IN}$	$R_L = \infty$		10	15	$\mu\text{A}$
Output voltage	$V_O$	$R_L = 60\Omega$ , $V_Z = 7.4\text{V}$	6.6	7.2	7.4	V
Output leakage current	$I_{OL}$	Pins 5,6 GND, $R_L = \infty$		0.01	1.0	mA
Current drain	$I_{CC}$	Pins 5,6 GND, $R_L = \infty$	3	6	10	mA
Saturation voltage (upper)	$V_{sat1}$	$I_{OUT} = 300\text{mA}$		1.9	2.2	V
	$V_{sat1'}$	$I_{OUT} = 500\text{mA}$		1.9	2.3	V
Saturation voltage (lower)	$V_{sat2}$	$I_{OUT} = 300\text{mA}$		0.25	0.5	V
	$V_{sat2'}$	$I_{OUT} = 500\text{mA}$		0.4	0.65	V

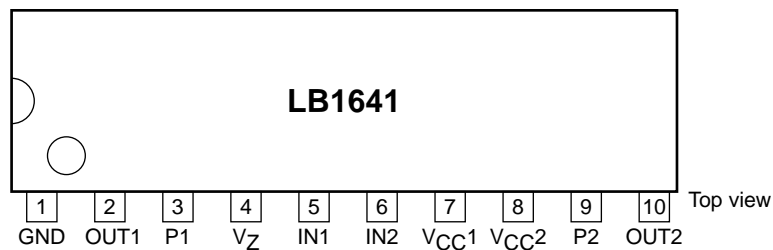
## Package Dimensions

unit : mm (typ)

3043C



## Pin Assignment



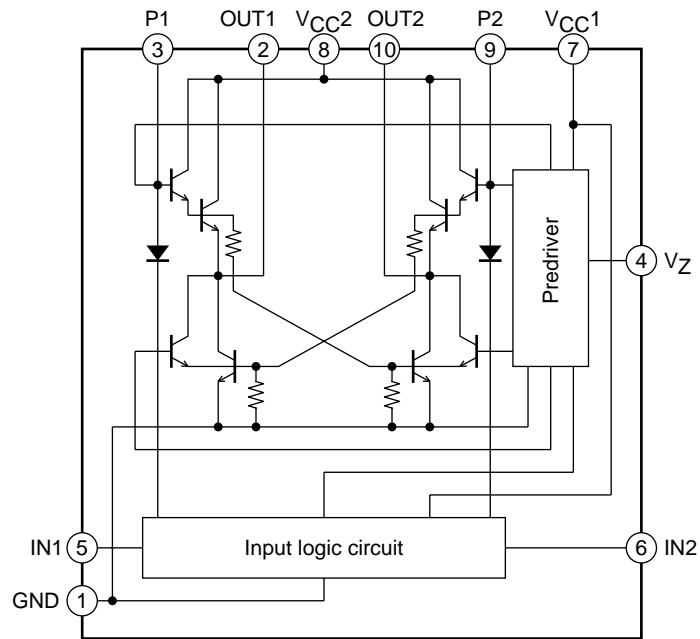
## Truth Table

Input		Output		Operation
IN1	IN2	IN3	IN4	
0	0	0	0	Braking
1	0	1	0	Forward (reverse) drive
0	1	0	1	Reverse (forward) drive
1	1	0	0	Braking

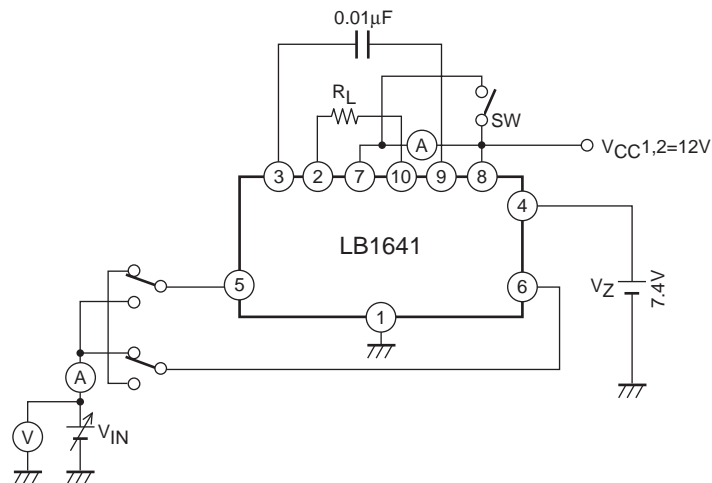
Input level 1 : 2.0V or greater  
0 : 0.7V or less

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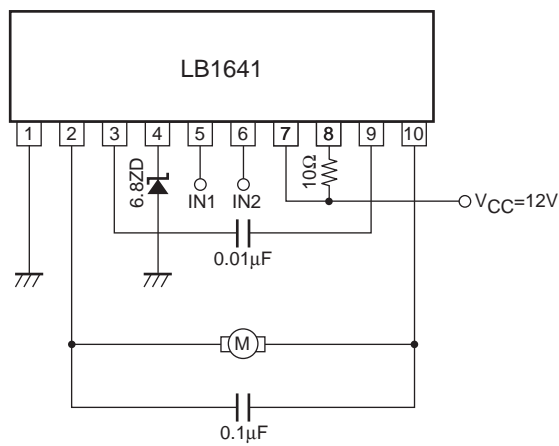
## Block Diagram

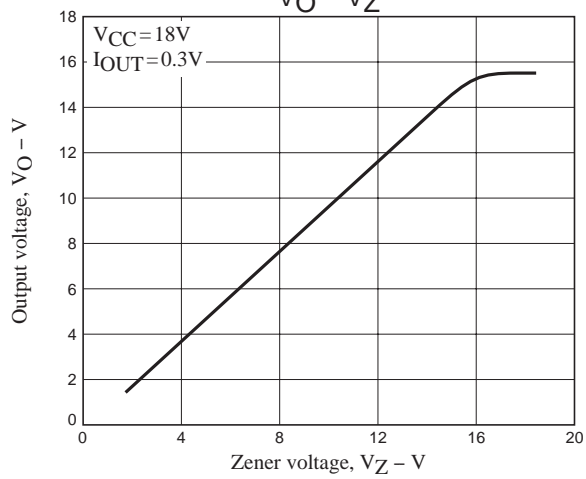
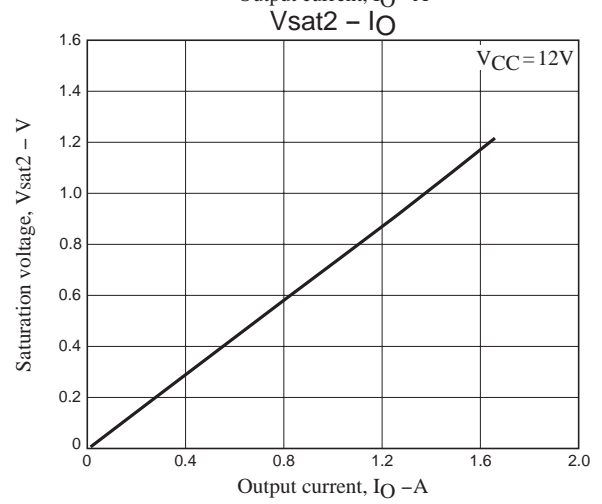
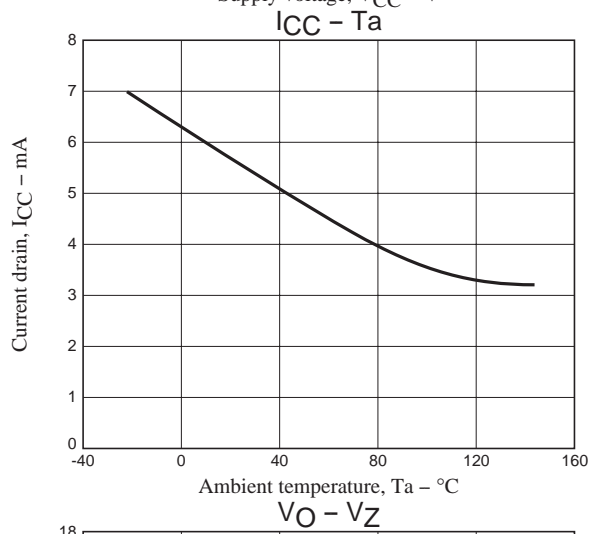
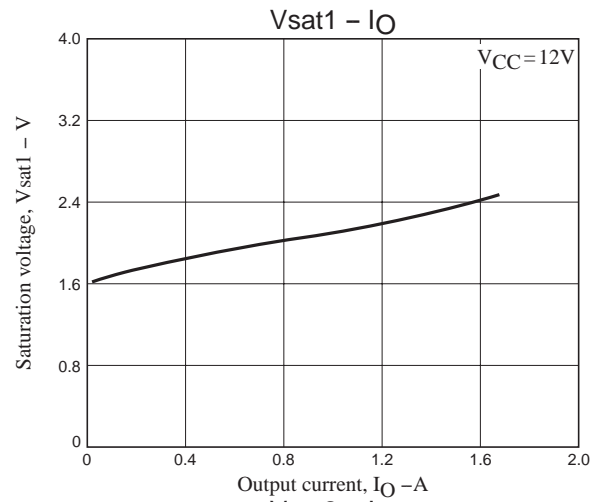
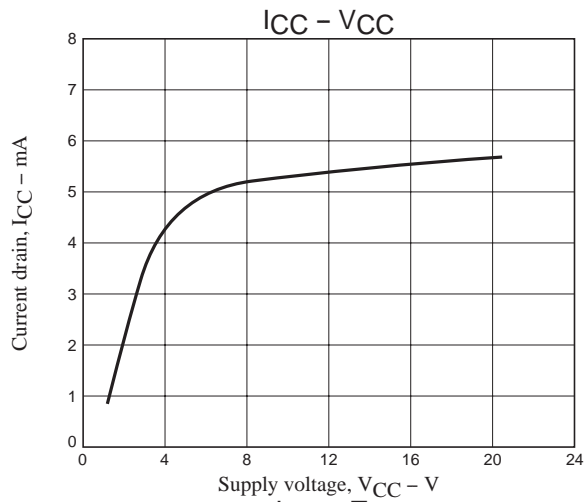


## Test Circuit



## Sample Application Circuit : 6V motor circuit





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