Allowable Operating Conditions at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Supply voltage range	V_{CC}		2.5 to 9.0	V
	V_S		2.2 to 9.0	V
Input high-level voltage	V_{IH}		2.0 to 9.0	V
Input low-level	V_{IL}		-0.3 to +0.7	V

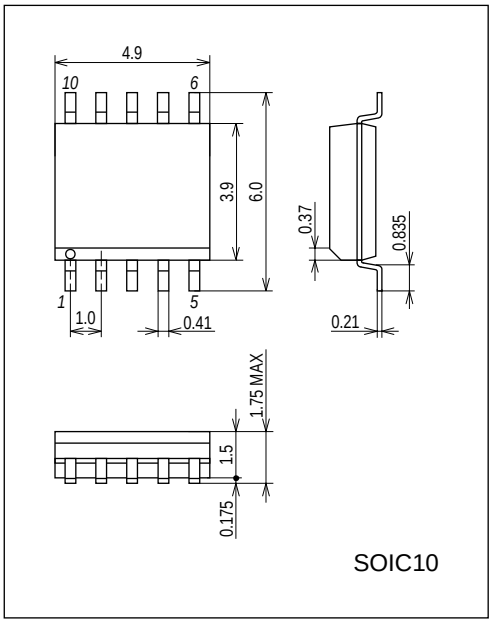
Electrical Characteristics at Ta = 25°C, V_{CC} = 5V

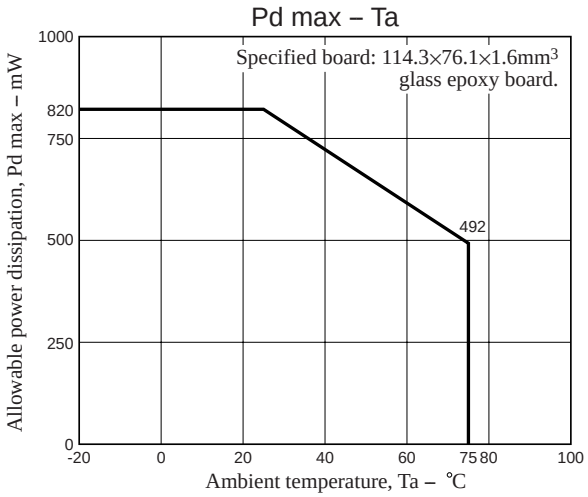
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Current drain	$I_{CC}0$	$V_{IN}1,2$ $I_{CC} + I_S$			10	μA
	$I_{CC}1$	$V_{IN}1$ = 3V, $V_{IN}2$ = 0V $I_{CC} + I_S$			20	mA
	$I_{CC}2$	$V_{IN}1,2$ = 3V $I_{CC} + I_S$			40	mA
Output saturation voltage (upper + lower)	$V_{OUT}1$	I_{OUT} = 200mA		0.25	0.5	V
	$V_{OUT}2$	I_{OUT} = 500mA		0.70	1.3	V
Output pin voltage difference		I_O = 200mA			0.1	V
Output sustain voltage	V_O(sus)	I_{OUT} = 500mA	9			V
Input current	I_{IN}	V_{IN} = 7V, V_{CC} = 7V			0.5	mA
Spark killer diode						
Reverse current	I_S(leak)	V_{CC}, V_S = 7V			10	μA
Forward voltage	V_{SF}	I_{OUT} = 200mA			1.7	V

Package Dimensions

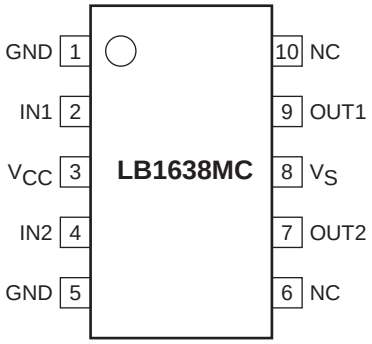
unit : mm (typ)

3426A





Pin Assignment

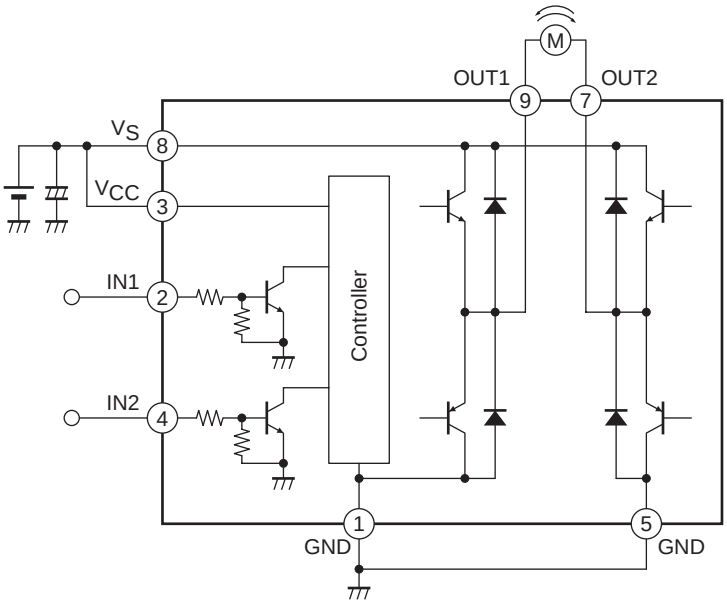


Note: both ground pins must be grounded.

Truth Table

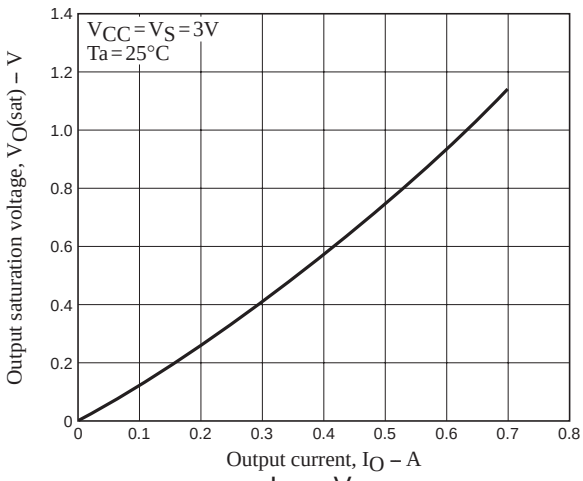
IN1	IN2	OUT1	OUT2	MOde
H	L	H	L	Forward
L	H	L	H	Reverse
H	H	L	L	Brake
L	L	OFF	OFF	Standby

Block Diagram and Sample Application Circuit

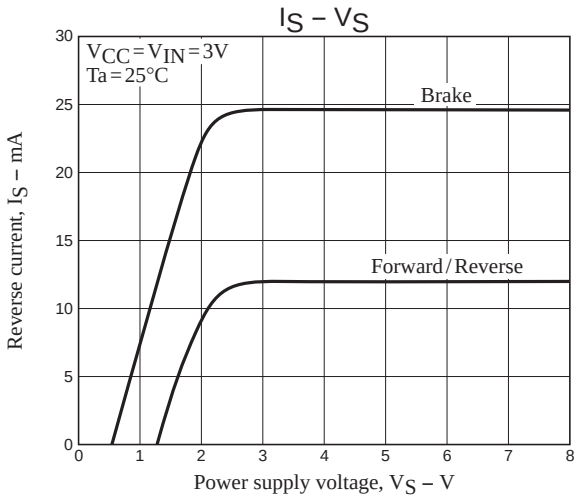


Note: When using the same power supply for V_S and V_{CC}, short the V_{CC} and V_S pins to each other or insert a capacitor in the V_{CC} line.

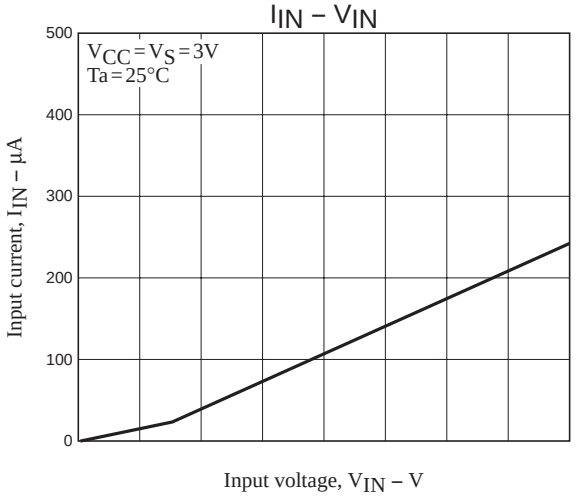
$V_O(sat) - I_O$



$I_S - V_S$



$I_{IN} - V_{IN}$



$I_{CC} - V_{CC}$