

### Description

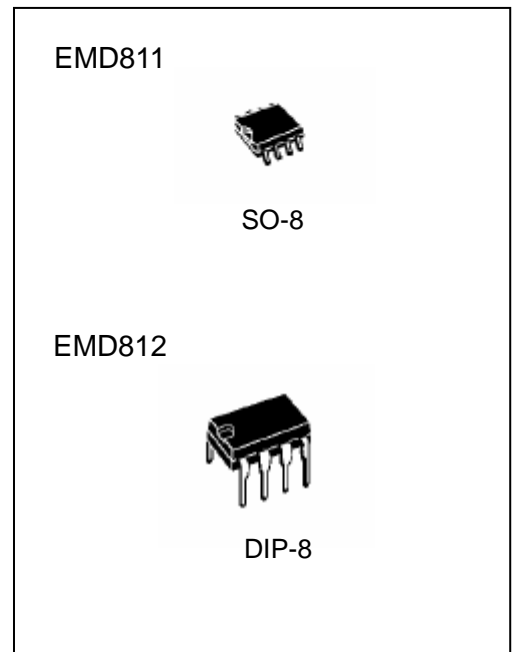
EMD series are monolithic integrated circuit designed for driving bi-directional DC motor, it is suitable for the loading motor of driver for Toys application. It has two pins of logic inputs for controlling the direction as forward and reverse.

### Features

- Built-in element to absorb a dash current derived from changing motor direction.
- Stable motor direction change.
- Interface with CMOS devices.
- Low standby current. (<1μA)

### Applications

- Low current DC motor such as Audio equipment.
- Toys Application.

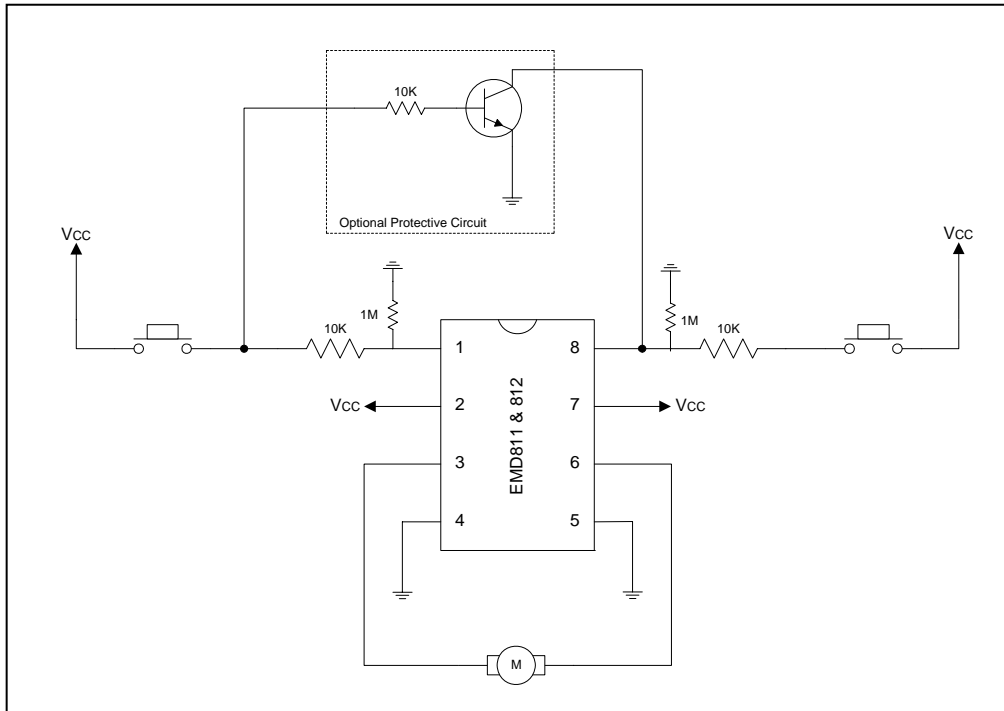


### Absolute Maximum Rating (T<sub>a</sub> = 25°C)

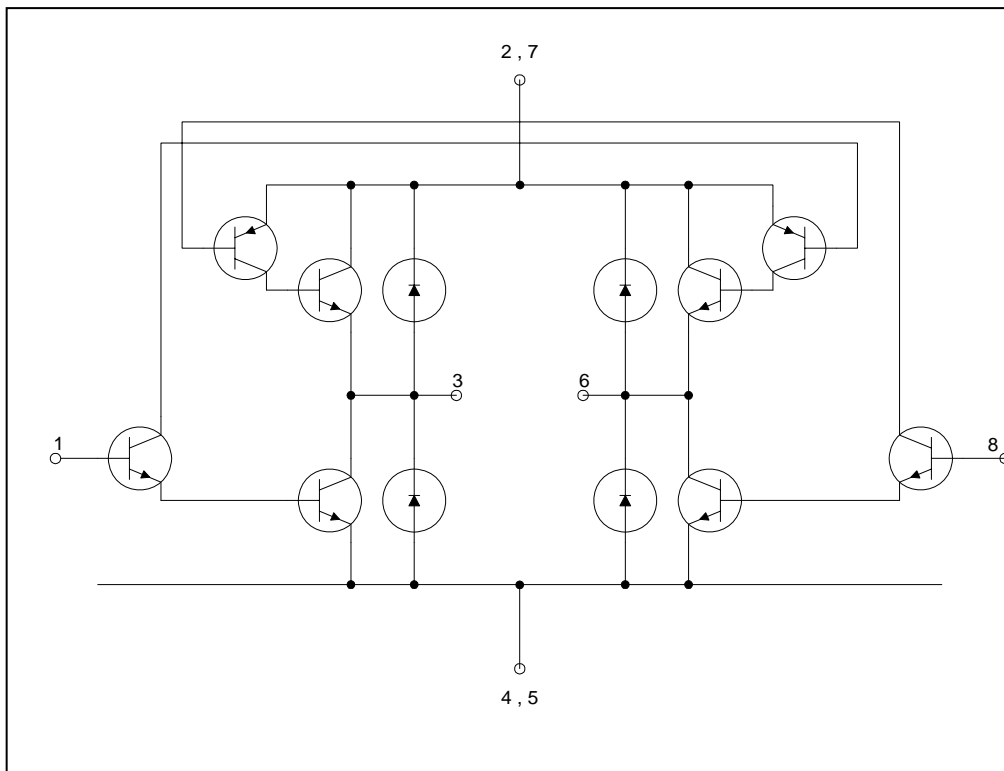
TEST		SYMBOL	CONDITION	RATING	UNIT
Standby Current		I <sub>QC</sub>	0 ~ 15	< 1	μA
Operation Voltage		V <sub>CC</sub>	$\frac{V_o}{V_{cc}} \geq \sqrt{\frac{1}{2}}$	3 ~ 15	V
Output Current (Continue)	EMD811	I <sub>C</sub>	Input Current = 6mA	650	mA
	EMD812		Input Current = 10mA	1	A
*Peak Current	EMD811	I <sub>P</sub>	V <sub>CC</sub> = 15V	2	A
	EMD812			3.5	
Power Dissipation	EMD811	P <sub>D</sub>		1.5	W
	EMD812			2.4	
Operation Temperature		T <sub>opr</sub>		-25 ~ +100	°C
Storage Temperature		T <sub>stg</sub>		-55 ~ +125	°C

\* Input Pulse : PW = 1s, Duty Cycle = 10%

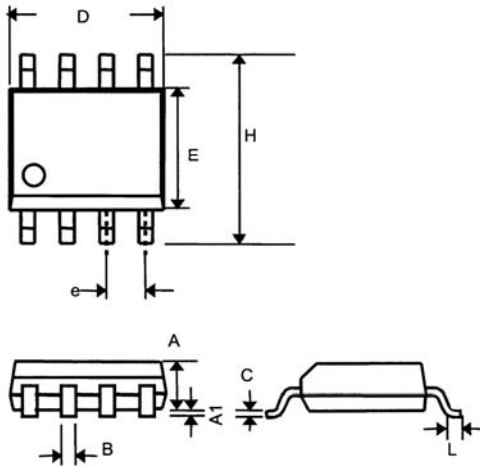
### Application Circuit



### Equivalent Circuit

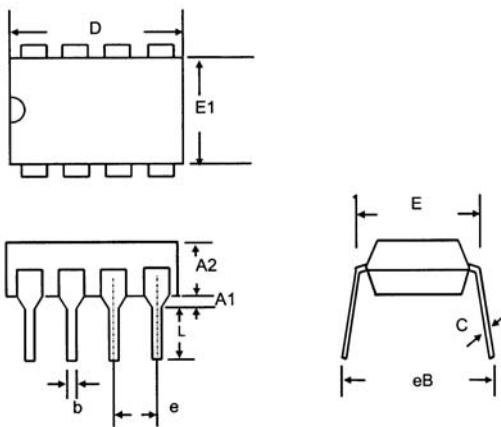


### 8 Lead Plastic SO (Unit: mm)



SYMBOL	MIN.	MAX.
A	1.35	1.75
A1	0.10	0.25
B	0.33	0.51
C	0.19	0.25
D	4.80	5.00
E	3.80	4.00
e	1.27 (TYP.)	
H	5.80	6.20
L	0.40	0.27

### 8 Lead Plastic Dip (Unit: mm)



SYMBOL	MIN.	MAX.
A1	0.381	—
A2	2.92	4.96
b	0.35	0.56
C	0.20	0.36
D	9.01	10.16
E	7.62	8.26
E1	6.09	7.12
e	2.54 (TYP.)	
eB	—	10.92
L	2.92	3.81