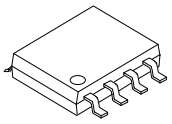
MOTOR CONTROL DRIVER CHIP



SOP-8

■ DESCRIPTION

The ASIC device UTC **MD9110** motror controller and driver is designed with two-channel push-pull power amplifier discrete circuits integrated into a monolithic IC, and peripheral devices reduce the cost, improve the reliability of all. This chip has two TTL / CMOS compatible output, with high reliability; Two output terminals can directly drive the motor forward or reverse. It has a large current driving capability, each channel through 750~800mA of continuous current, peak current capability up to 1.5~2.0A, and it has a low output saturation voltage; built-in clamp diode which can release the reverse current of the inductive load. UTC **MD9110** is widely used in toy car motor, stepper motor or switching power tube.

■ FEATURES

* Wide supply voltage range: 2.5V~12V
* Low quiescent current
* Lower saturation voltage
* 800mA continuous output current capability per channel
* TTL / CMOS compatible output, and can be directly connected to the CPU
* Built-in clamp diodes for inductive load
* Control and drive integrated into a monolithic IC
* High-voltage protection pin

■ ORDERING INFORMATION

Ordering Number		Package	Packing
Lead Free	Halogen Free		
MD9110L-S08-R	MD9110G-S08-R	SOP-8	Tape Reel

MD9110G-S08-R

(1)Packing Type

(2)Package Type

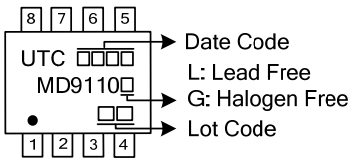
(3)Green Package

(1) R: Tape Reel

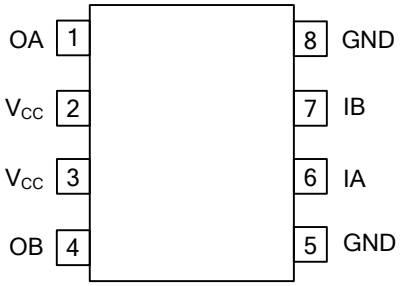
(2) S08: SOP-8

(3) G: Halogen Free and Lead Free, L: Lead Free

■ MARKING



■ PIN CONFIGURATION



■ PIN DESCRIPTION

PIN NO.	PIN NAME	DESCRIPTION
1	OA	A output pin
2, 3	V_{CC}	Supply Voltage
4	OB	B output pin
5, 8	GND	Ground
6	IA	A input pin
7	IB	B input pin

■ TEST CONDITIONS (V_{CC}=9V, I_{OUT}=750mA)

PARAMETER	SYMBOL	MIN	TYP	MAX	UNIT
Output high	VH_{OUT}		7.7		V
Output low	VL_{OUT}		1.0		V
Input high	VH_{IN}	2.5	5.0	9.0	V
Input low	VL_{IN}	0	0.5	0.7	V

■ ELECTRICAL CHARACTERISTICS

PARAMETER	SYMBOL	MIN	TYP	MAX	UNIT
Supply Voltage	V_{CC}			12	V
Quiescent Current	I_{DD}		0	2	uA
Operating current	I_{IN}	200	400	600	uA
Continuous	I_C		800		mA
Current peak	IMax		1500		mA

■ LOGICAL RELATIONSHIP

IA	IB	OA	OB
H	L	H	L
L	H	L	H
L	L	Z (High Impedance)	Z (High Impedance)
H	H	Z (High Impedance)	Z (High Impedance)

■ TYPICAL APPLICATION CIRCUIT