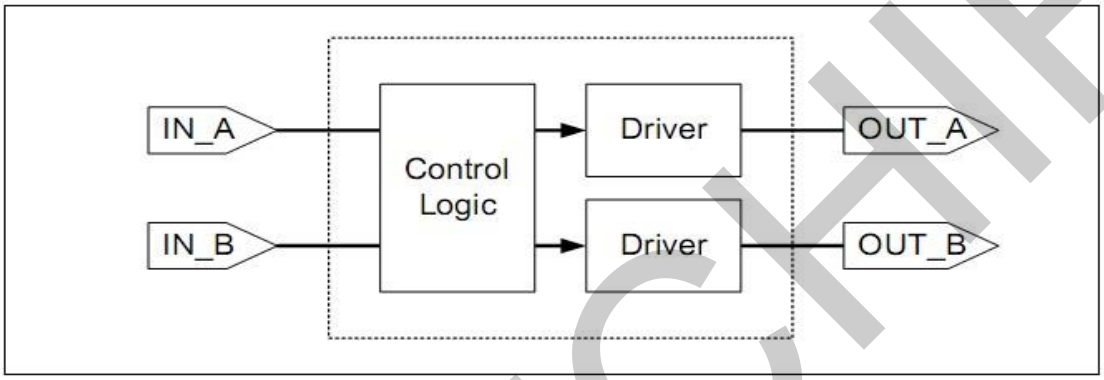
GENERAL DESCRIPTION

The HT5125F is a bi-directional motor driver with Forward/Reverse/stop/Release function for motor driver application..

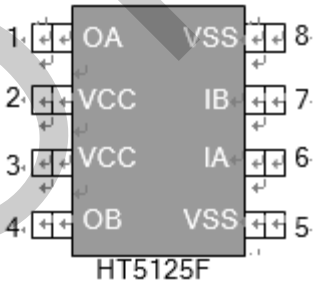
FEATURES

- Low voltage operation
- Low current drain at standby mode
- Provide 4 modes motor driver, Forward/Reverse/Stop/Release
- Over-current auto protection

BLOCK DIAGRAM



PIN DESCRIPTIONS



Symbol	I/O Type	Pin#	Description
VDD	P	2,3	Power Supply
VSS	G	5,8	Ground Supply
IN_A	I	6	Input Signal A
IN_B	I	7	Input Signal B
OUT_A	O	1	Motor Driver Output A
OUT_B	O	4	Motor Driver Output B

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FUNCTIONAL DESCRIPTIONS

IN_A	IN_B	OUT_A	OUT_B	MODE
L	L	Z	Z	Release
H	L	H	L	Forward
L	H	L	H	Reverse
H	H	L	L	Break

ELECTRICAL CHARACTERISTICS at 25℃

Item	Symbol	Min.	Typ.	Max.	Unit	Condition
Operating Voitage	V_{DD}	1.6	3.6	4.2	V	
Standby Current	I_{DDS}	-	2	5	uA	V_{DD}=3V, IN_A/IN_B = V_{SS}
Operating Current	I_{DDO}	-	150	300	uA	V_{DD}=3.6V, no load
Input High Voltage	V_{IH}	1.2	-	V_{DD}	V	V_{DD}=3V
Input Low Voltage	V_{IL}	V_{SS}	-	0.8	V	V_{DD}=3V
Output RO_UP	RO_UP		0.23		Ω	V_{DD}=3.6V
Output RO_DN	RO_DN		0.20		Ω	V_{DD}=3.6V
OTP_R				150	℃	
OTP_F				100	℃	

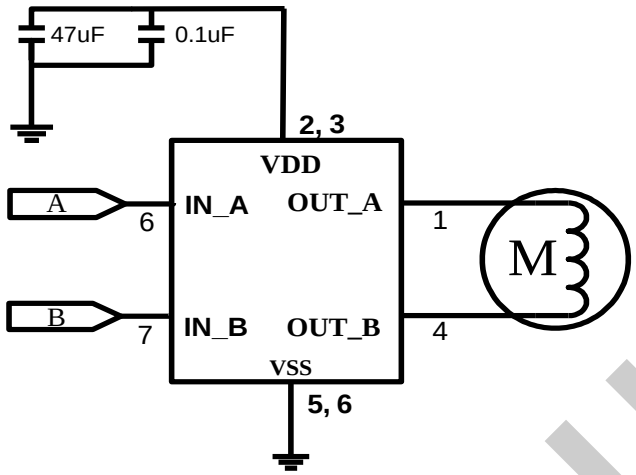
ABSOLUTE MAXIMUM RATINGS

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Supply Voltage	V_{DD}	-0.3	-	4..8	V	-
Output Current	L_{OUT}	-	2.0	-	A	-
Logic Input Voltage Range	V_{IN}	-0.3	-	V_{DD}+0.3	V	-
Junction Temperature	T_J	-	-	125	^{0}C	-
Storage Temperature Range	T_{STG}	-40	-	150	^{0}C	-
Operating Temperature Range	T_A	0	-	85	^{0}C	-

Note: Output current rating may be limited by ambient temperature,heat sink and air flow etc.Do not exceed the junction temperature of 150℃ under any set of conditions.

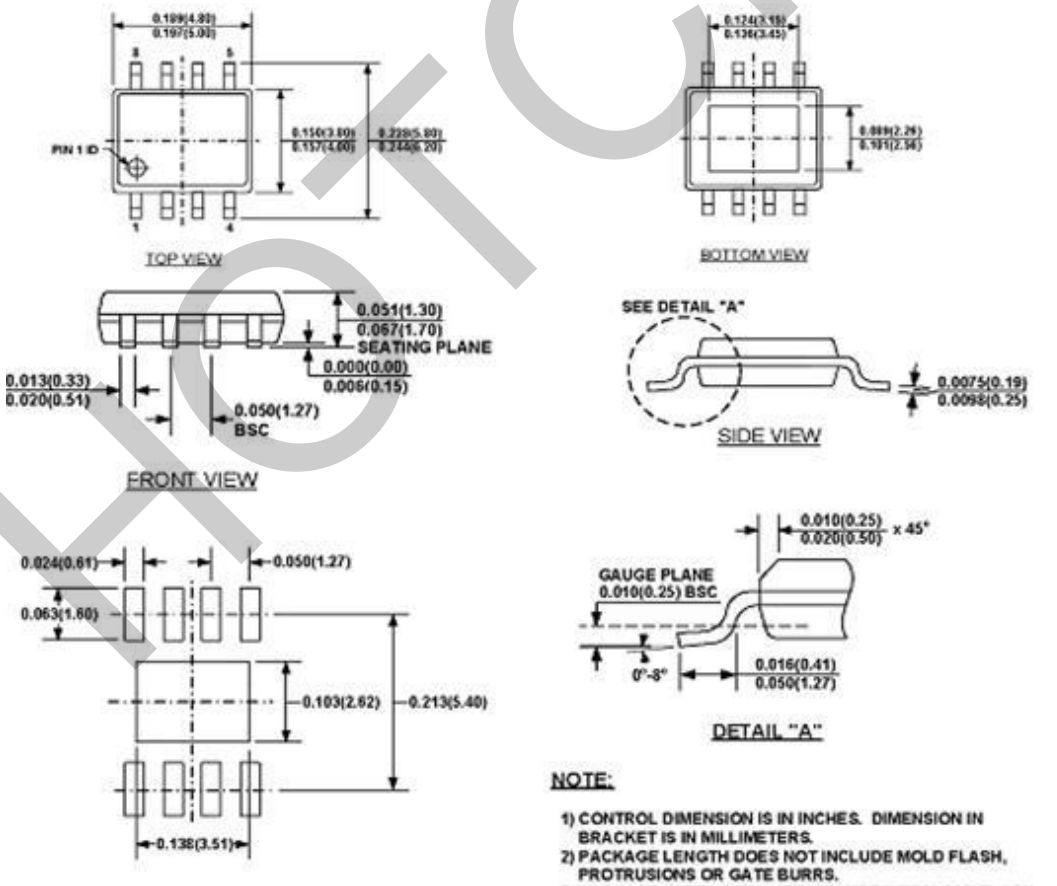
HOTCHIP

BLOCK DIAGRAM



Package Information

ESOP8 PACKAGE OUTLINE DIMENSIONS

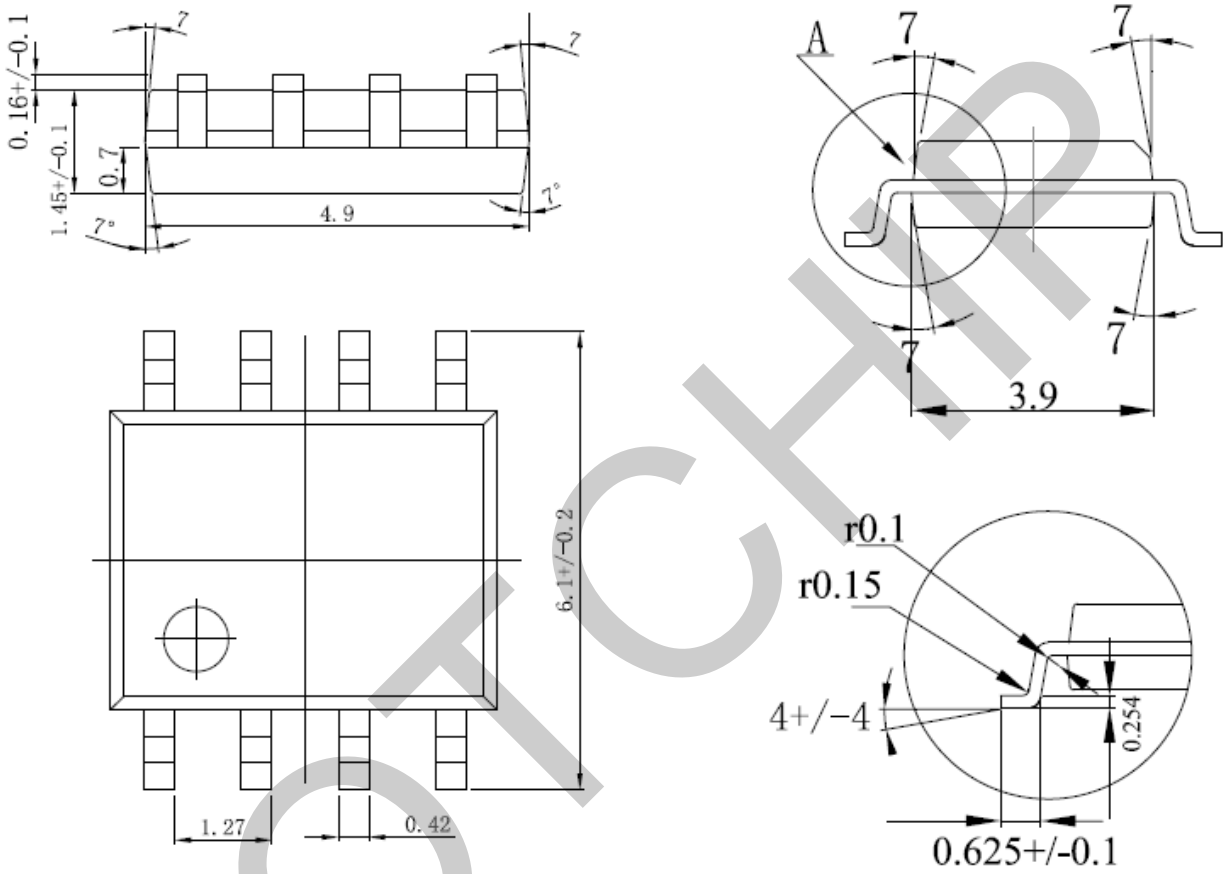


NOTE:

1) CONTROL DIMENSION IS IN INCHES. DIMENSION IN BRACKET IS IN MILLIMETERS.
2) PACKAGE LENGTH DOES NOT INCLUDE MOLD FLASH, PROTRUSIONS OR GATE BURRS.
3) PACKAGE WIDTH DOES NOT INCLUDE INTERLEAD FLASH OR PROTRUSIONS.
4) LEAD COPLANARITY (BOTTOM OF LEADS AFTER FORMING) SHALL BE 0.004" INCHES MAX.
5) DRAWING CONFORMS TO JEDEC MS-012, VARIATION BA.
6) DRAWING IS NOT TO SCALE.

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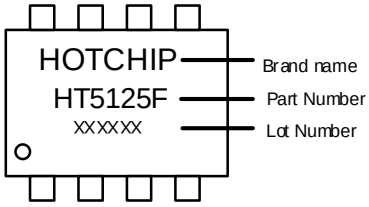
SOP8 PACKAGE OUTLINE DIMENSIONS



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PACKAGE DESCRIPTION

Device Marking and Ordering Information



Package	Chip surface marking	Purchasing the device name
ESOP8/SOP8 Pb-free	HT5125F	HT5125F

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