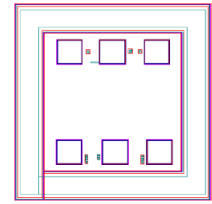


**AMT1811
FET Driver Chip**



Key Features :

- Operation method : convert pulse signal input into complementary signal output
- Operation voltage : -5V
- Input level : TTL level compatible
- Output level : 0/-4.8V
- Static current : 2.9mA
- Chip dimensions : 0.55mm x 0.55mm x 0.1mm
- Applications : wireless communication, transceiver module, radio telecommunication etc.

Description :

AMT1811 is a FET driver chip, it is designed by Gallium Arsenide (GaAs) process. This chip is designed with ground through metal vias on the back technology.

Absolute Maximum Ratings (Ta = 25°C)

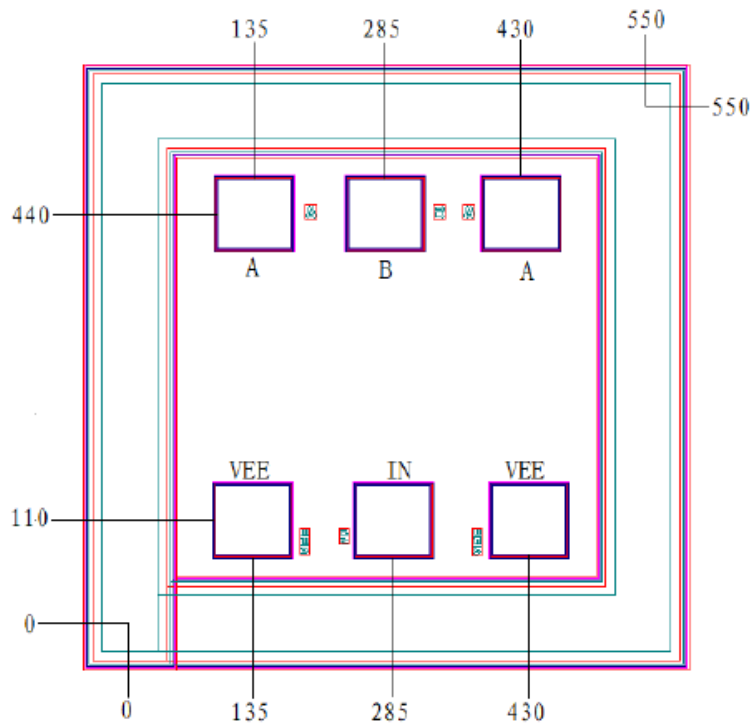
Symbol	Parameter	Value	Remark
V _{EE}	Supply voltage	-6V	
V _{IH}	Input high level	5.5V	
V _{IL}	Input low level	-0.5V	
T _{ch}	Operation Temperature	150°C	
T _m	Sintering Temperature	310°C	30s, N ₂ protection
T _{stg}	Storage Temperature	-65 ~ +150°C	

[1] Operation outside any of the Absolute Maximum Ratings may cause permanent device damage.

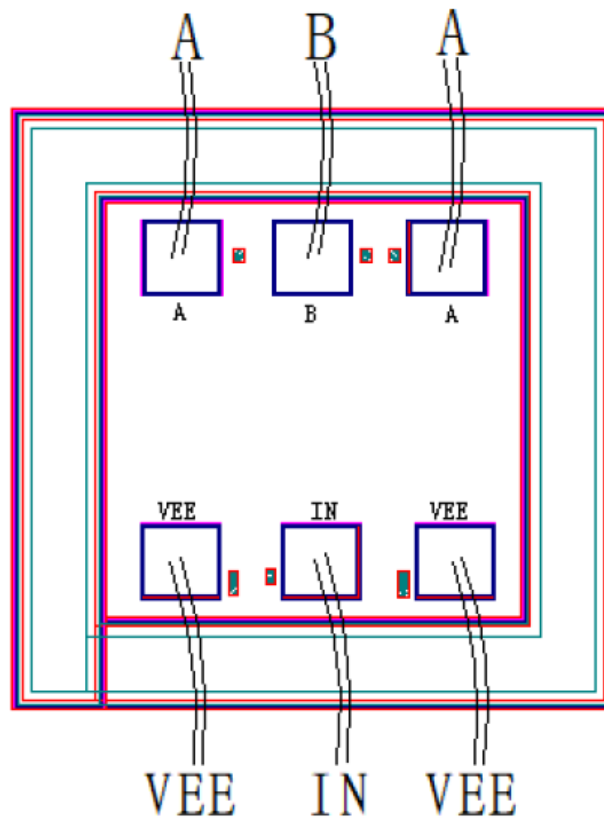
Electrical Characteristics (Ta = 25°C)

Symbol	Parameter	Value			Unit	Remark
		Min	Typical	Max		
V _{EE}	Supply voltage	-5.5	-5	-4.5	V	Chip normal operation voltage
I _{EE}	Static current	-	2.9	-	mA	Chip power on current
V _{IH}	Input high level	1.8	5	5	V	A1 lead input voltage, compatible with TTL level
V _{IL}	Input low level	0	0	1.2	V	
I _I	Input current	-	0.02	0.5	mA	-
V _{OH}	Output high level	-	0	-	V	Output port 1A and its reverse port 1B output voltage
V _{OL}	Output low level	-	-4.8	-	V	
I _O	Output (drive) current	-	1	-	mA	Related to load
F	Frequency range	-	10	-	MHz	Related to load

Chip Dimensions (Unit : μm)



Chip Layout Diagram



Pad Definition

Symbol	Function	PAD Dimension	Description
VEE	Supply voltage input port	85*81 μ m	Connect to -5V voltage
IN	Pulse input port	85*81 μ m	Supportable maximum frequency is determined by load
A	Pulse output port	85*81 μ m	Same as input pulse level
B	Pulse output port	85*81 μ m	Opposite to input pulse level

Truth Table

Input	Output	
IN	A	B
Li	Lo	Ho
Hi	Ho	Lo

Note, take 0/5V input pulse level and -5V supply voltage for example, Li represents 0V, Hi represents 5V, Lo represent -4.8V, Ho represents 0V.