

# SM7075-12/SM7075-18

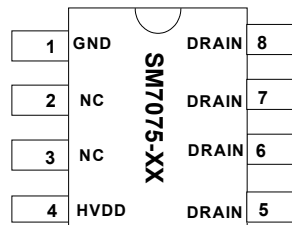
- ◆ BUCK
- ◆ -BOOST
- ◆ 730V
- ◆ 85Vac~265Vac
- ◆ 120mW@220Vac
- ◆ 60KHz
- ◆ EMC
- ◆ PWM
- ◆ EMC
- ◆ DIP8 SM7022
- ◆ DIP8 TO252-2

SM7075

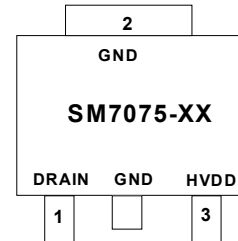
PWM

BUCK

12V/18V



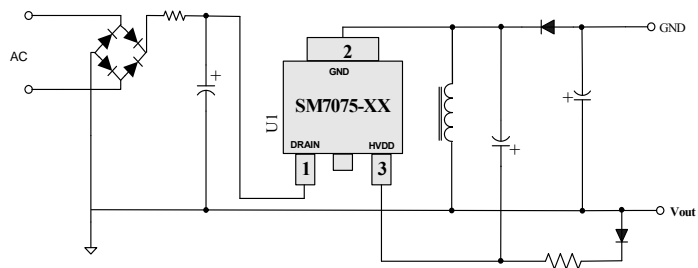
DIP8

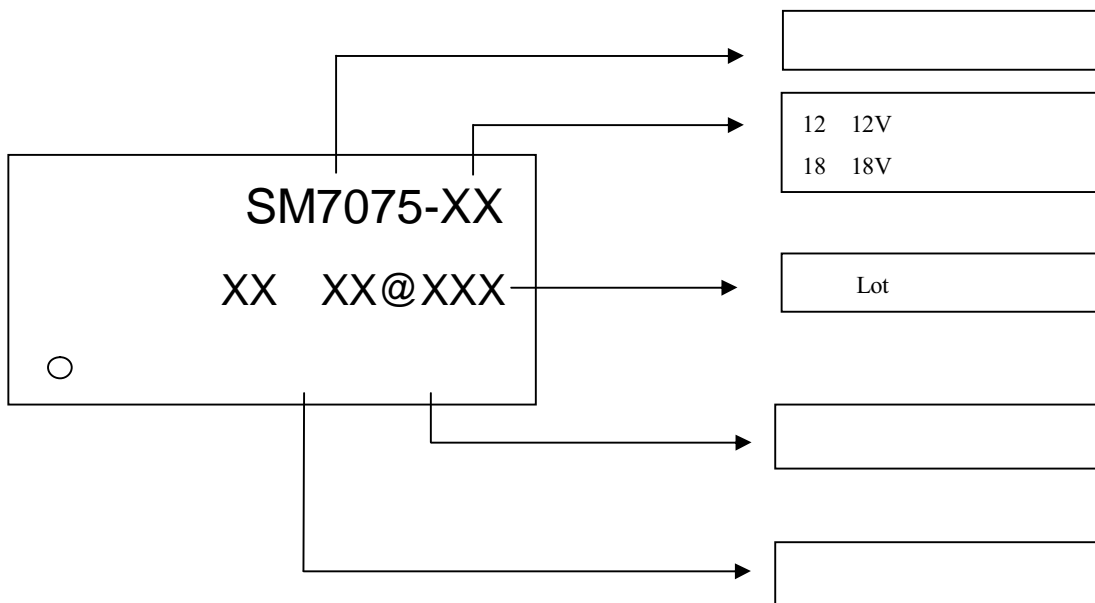


TO252-2

	DIP8	TO252-2
12V	SM7075-12	SM7075-12
18V	SM7075-18	SM7075-18

		85Vac~265Vac	180Vac~265Vac
	DIP8	12V 350mA	18V 400mA
	TO252-2	12V 400mA	18V 450mA





	TO252-2	DIP8	MOS DRAIN
	DRAIN	1	
GND	2	1	
HVDD	3	4	
NC		2,3	

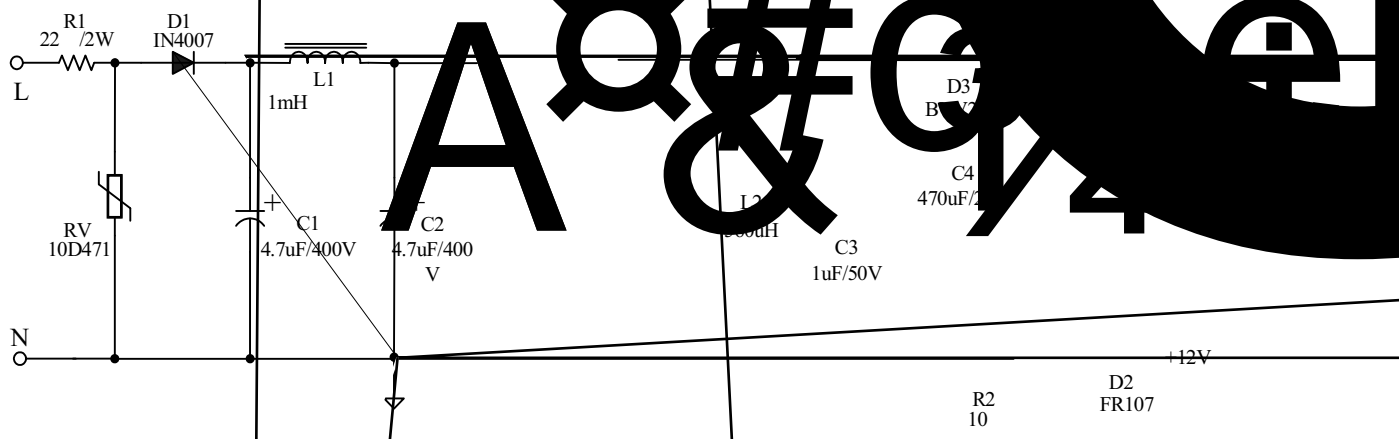
(TA=25 )

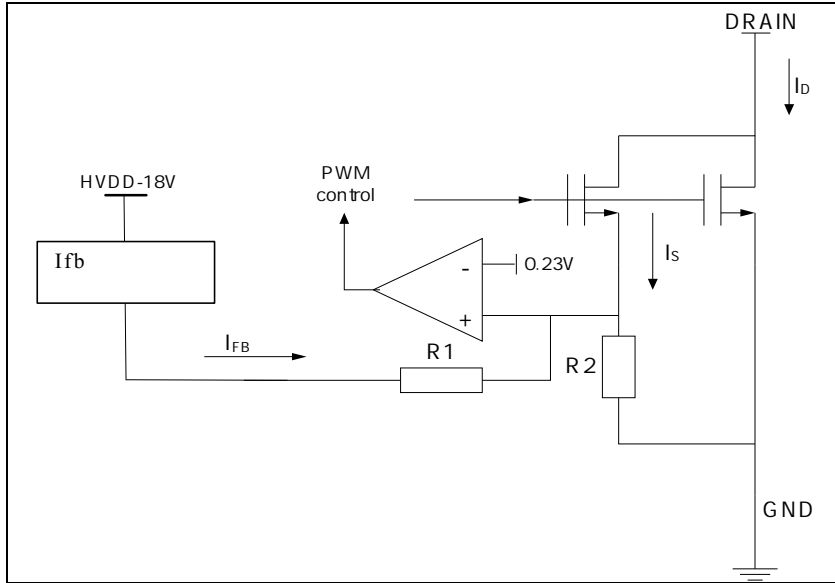
V <sub>DS(max)</sub>	DRAIN	-0.3-730	V
V <sub>DS(ST)</sub>	DRAIN	-0.3-730	V
HVDD		-0.3 20	V
I <sub>HVDD</sub>		10	mA
V <sub>ESD</sub>	ESD	2000	V
T <sub>J</sub>		-40 150	
T <sub>STG</sub>		-55 150	

R <sub>thJA</sub>	(1)	45	W
1	200mm <sup>2</sup>	PCB	35um
			GND

( TA=25

BV <sub>DS</sub>		HVDD=13V; I <sub>D</sub> =1mA	730		V
I <sub>DSS</sub>	DRAIN	V <sub>FB</sub> =13V; V <sub>DS</sub> =500V		Q1	mA
R <sub>DS(on)</sub>		I <sub>D</sub> =0.2A		13	Ohm
HVDD <sub>ON</sub>	HVDD			11.5	V
HVDD <sub>OFF</sub>	HVDD			8	V
HVDD <sub>HYS</sub>	HVDD			3.5	V
I <sub>DD2</sub>	HVDD	HVDD=11V		0.5	mA
I <sub>DDCH</sub>		V <sub>DS</sub> =100V; HVDD=5V		-500	uA
F <sub>OSC</sub>				60	KHz
F <sub>OSC</sub>				4	%
T <sub>OVr</sub>				150	
HVDD	HVDD	SM7075-12		12	V
		SM7075-18		18	V





MDS  $I_D = G_{ID} \cdot I_S$

$(I_S + I_{FB}) \cdot R2 = 0.23V$

$I_S = \frac{0.23V}{R2} - I_{FB}$

$I_D = G_{ID} \cdot \left( \frac{0.23V}{R2} - I_{FB} \right)$

PWM

$I_S \quad I_D$

IFB

ID

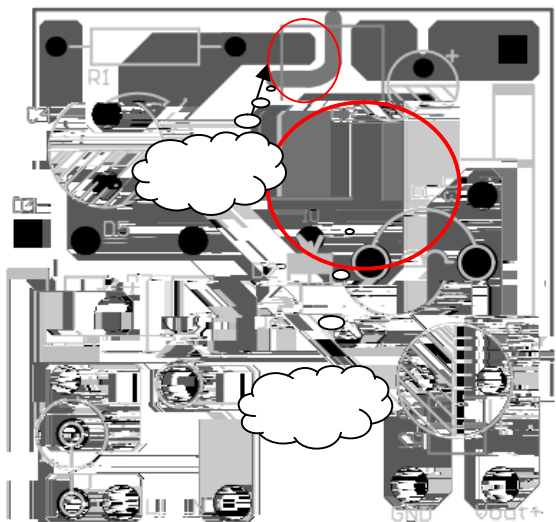
IFB

ID

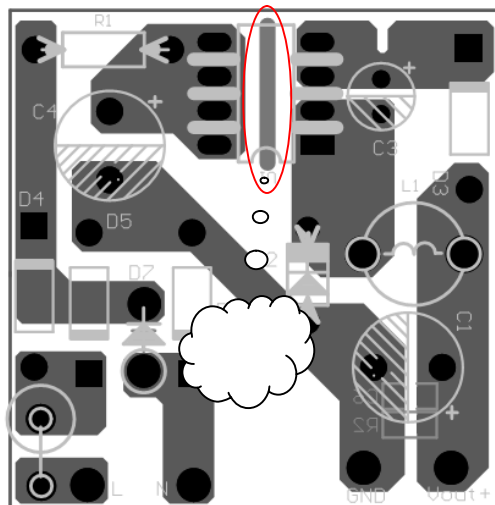
IFB

$(0.23V / R2)$

PCB layout

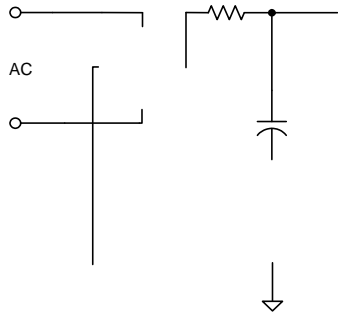


TO252-2



DIP8

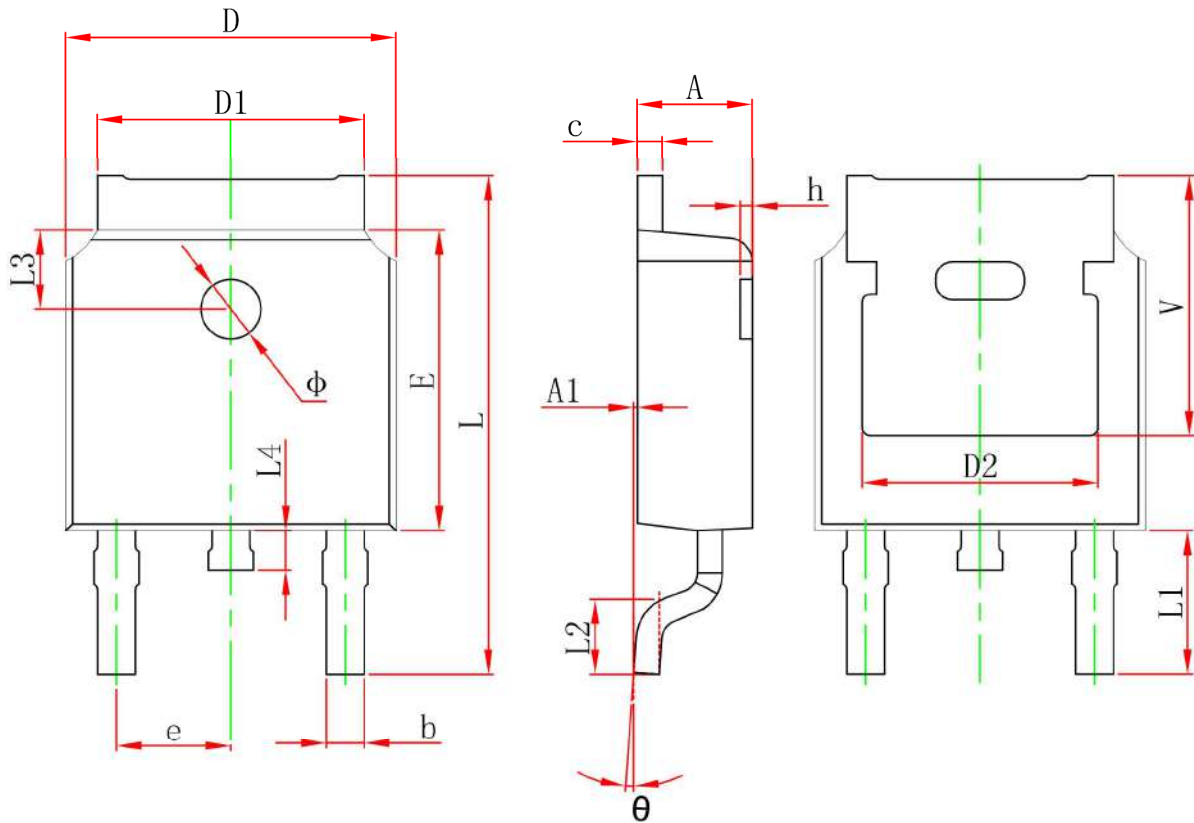
TO252-2	◆ IC 2 GND				8*8mm	
	◆ IC 1 DRAIN 2 GND 3 HVDD					EMC
DIP8	◆ IC 1 DRAIN 2 GND 3 HVDD					EMC
	◆					



—

TO252-2

## TO-252-2L(PIN 4ROW) PACKAGE OUTLINE DIMENSIONS



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	2.200	2.400	0.087	0.094
c	0.460	0.580	0.018	0.023
D	6.500	6.700	0.256	0.264
D1	5.100	5.460	0.201	0.215
D2	4.830 REF.		0.190 REF.	
E	6.000	6.200	0.236	0.244
e	2.186	2.386	0.086	0.094
L	9.800	10.400	0.386	0.409
L1	2.900 REF.		0.114 REF.	
L2	1.400	1.700	0.055	0.067
L3	1.600 REF.			



DIP8

