

SM7075-12/SM7075-18

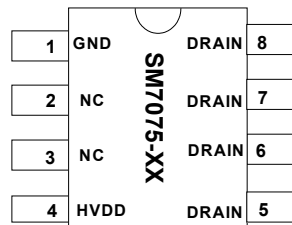
- ◆ BUCK
- ◆ -BOOST
- ◆ 730V
- ◆ 85Vac~265Vac
- ◆ 120mW@220Vac
- ◆ 60KHz
- ◆ EMC
- ◆ PWM
- ◆ EMC
- ◆ DIP8 SM7022
- ◆ DIP8 TO252-2

SM7075

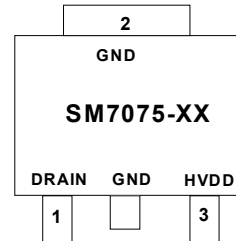
PWM

BUCK

12V/18V



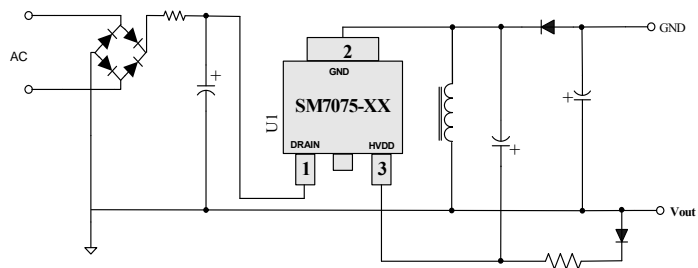
DIP8

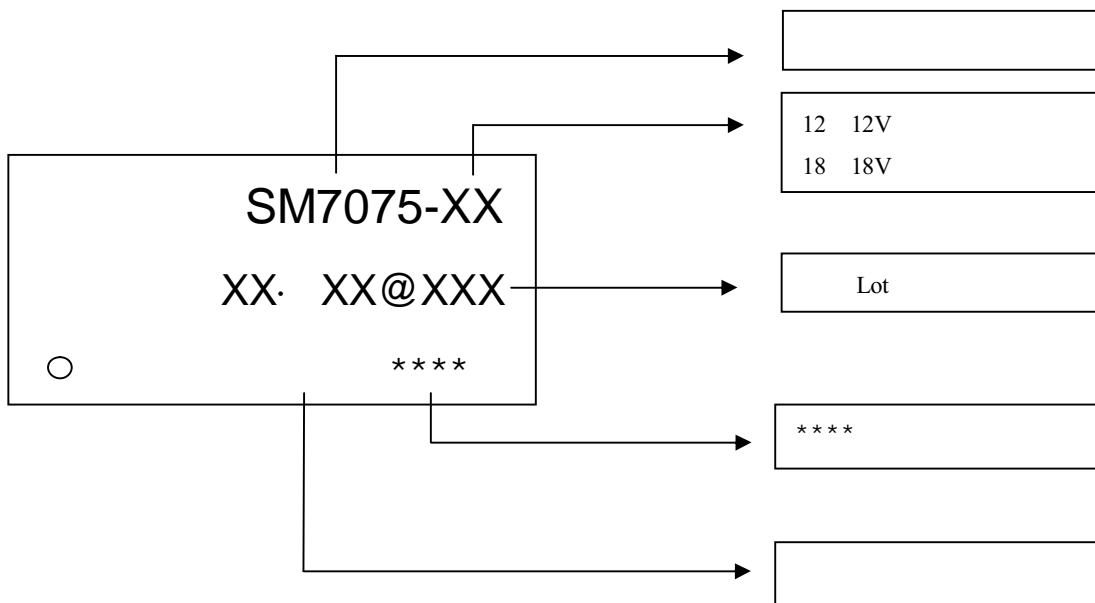


TO252-2

	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	
DRAIN	1	5,6,7,8	MDS DRAIN
GND	2	1	
HVDD	3	4	
NC	—	2,3	

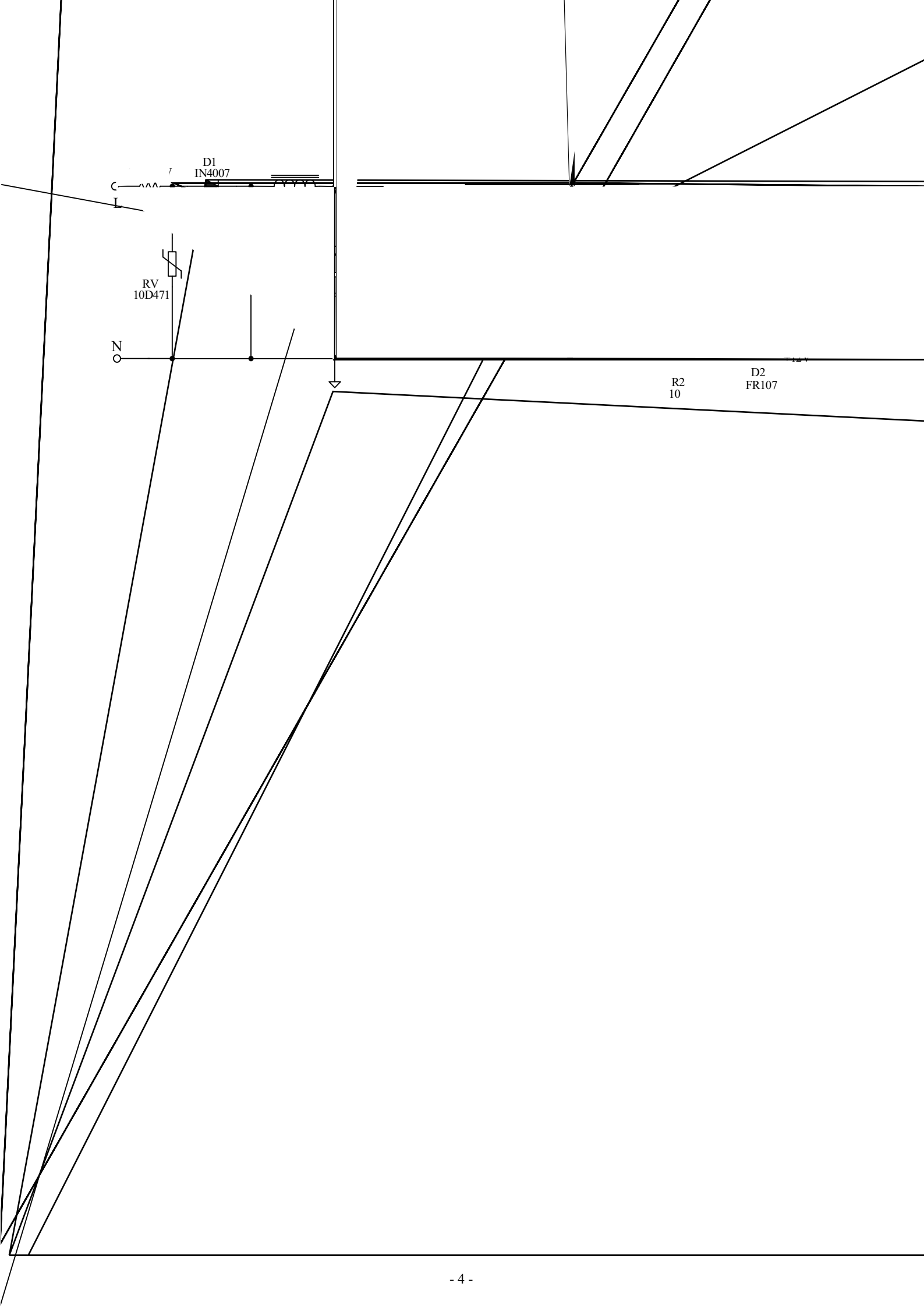
(TA=25)

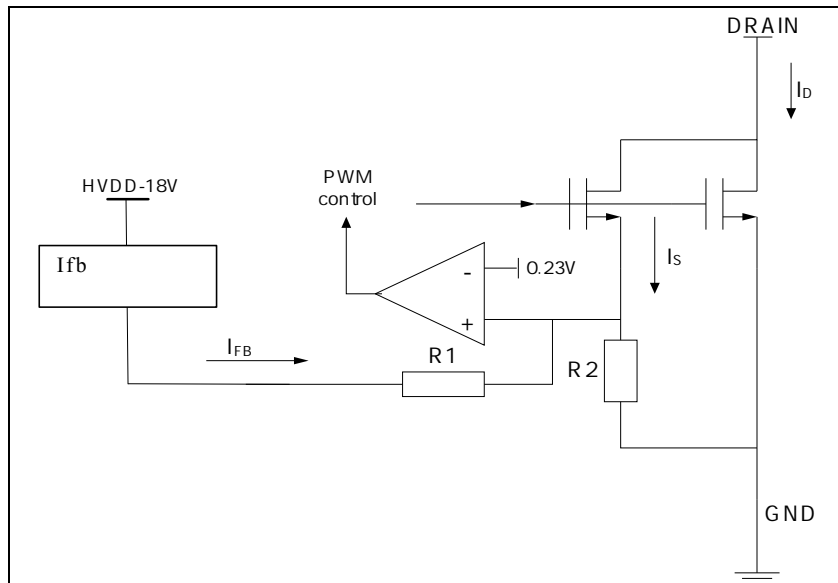
$V_{DS(max)}$	DRAIN	-0.3-730	V
$V_{DS(ST)}$	DRAIN	-0.3-730	V
HVDD		-0.3 20	V
I_{HVDD}		10	mA
V_{ESD}	ESD	2000	V
T_J		-40 150	
T_{STG}		-55 150	

R_{thJA}	(1)	45	$^{\circ}C/W$
1	200mm ²	PCB	35um
			GND

(TA=25

BV_{DS}		HVDD=13V; $I_D=1mA$	730		V
I_{DSS}	DRAIN	$V_{FB}=13V$; $V_{DS}=500V$		0.1	mA
$R_{DS(on)}$		$I_D=0.2A$		13	Ohm
HVDD _{ON}	HVDD			11.5	V
HVDD _{OFF}	HVDD			8	V
HVDD _{HYS}	HVDD			3.5	V
I_{DD2}	HVDD	HVDD=11V		0.5	mA
I_{DDCH}		$V_{DS}=100V$; HVDD=5V		-500	uA
F_{OSC}				60	KHz
F_{osc}				4	%
T_{OVT}				150	
* HVDD	HVDD	SM7075-12		12	V
		SM7075-18		18	V





MDS I_D

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

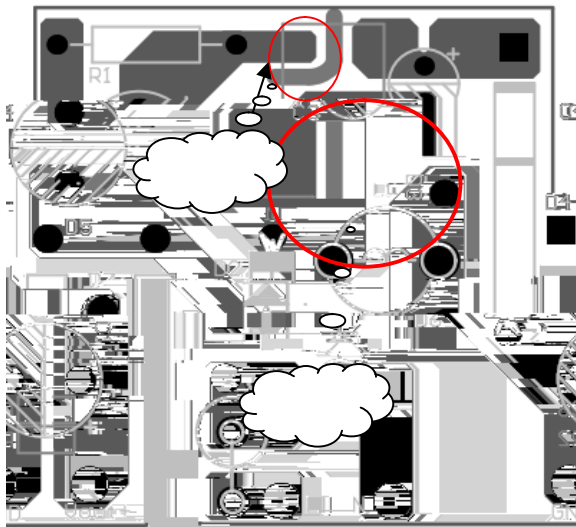
$$(I_S + I_{FB}) \cdot R2 = 0.23V$$

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

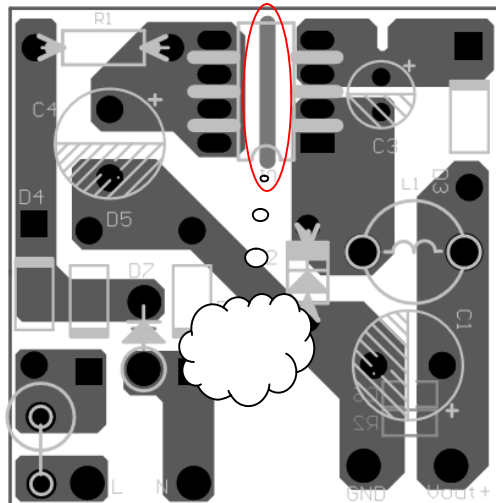
$$I_D = G_{ID} \cdot \left(\frac{0.23V}{R2} - I_{FB} \right)$$

IFB ID IFB ID IFB (0.23V / R2)
PWM

PCB layout



T0252-2



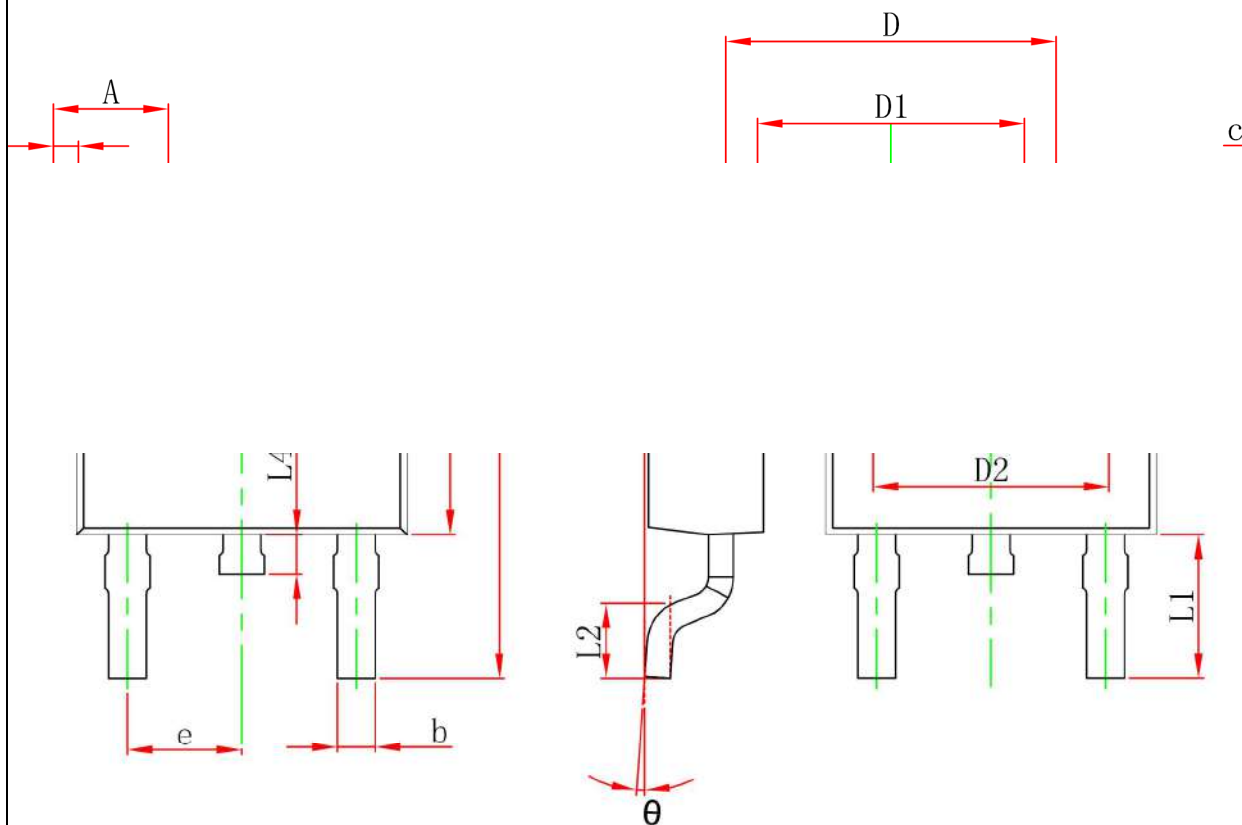
DIP8

T0252-2	◆ IC 2 GND	8*8mm
	◆ IC 1 DRAIN 2 GND 3 HVDD	
	◆	EMC
DIP8	◆ IC 1 DRAIN 2 GND 3 HVDD	
	◆	EMC

TO252-2

OUTLINE DIMENSIONS

TO-252-2I (PIN 4ROW) PACKAGE OUTLINE



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

