

\$ %LSRODU /LQH DU 5HJXODWRU 66

Features

- z 2XWSXW FXUUHQW LV \$ z 6WDQGE\ FXUUHQW P\$ W\ S
- z 5DQJH RI RSHUDWLRQ LQSXW YROWDJH RDRDG9UHJXODWLRQ \$ W\ S
- z /LQH UHJXODWLRQ 9 W\ S z (QYLURQPHQW 7HPSHUHWXUH

Applications

- z W}Á Œ D v P u vš (}Œ }u%µš Œ Ds}šZ Œ } Œ
- } Œ U 'Œ %Z] Œ z ^> D} u
- z > D}v]š}Œ v > ds z 3RVW 5HJXODWLRQWZLUWFKLQJ 6XSSOLHV

General Description

66 LV D VROXODWRU ZLWKLQ 66 RIIHUV WKHUPDO VKXW GRZQ IXQF
 UHJXODWRU GURSRXW RI 9 DW \$ WKH DFXUDWLRQ FKLS DQG SRZHU V\ VW
 66 IHDWXUHV D YHU\ ORZ VWDQGE\ XPLQDWHFKQLTXH WR JXDUDQWHH R
 FRPSDUHG WR P\$ RI FRPSHWLWURU ZLWKLQ 2WKHU RXWSXW YROWDJH DF
 2WKHU WKDQ D IL[HG YHU\LRQ 9RXW FXVWRPLJHG RQ GHPDQG VXFK
 9 9É DQG 66 KDV DQ DGMXVWDEOH DYDLODEOH LQ 6272
 YHUVLRQDFZURKLGXVSDXWWDJH IURP SRZHU SDFNDJH
 9 ZLWKWZROWHU GDDVWRUV

Selection Table

Part No.	Part No.	Output Voltage	Package
^†ííó	XX=12	1.2V	SOT223 TO252 SOT89
	XX=5	1.5V	
	XX=18	1.8V	
	XX=285	2.85V	
	XX=25	2.5V	
	XX=33	3.3V	
	XX=50	5.0V	
	XX=ADJ	Adj	

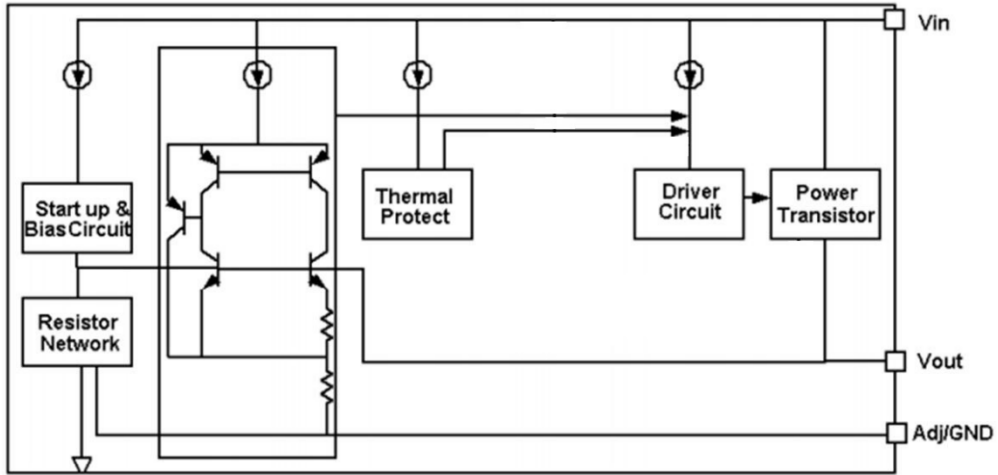
Ordering Information

Part No.	Package Type	Packing type
^†117PR-XXV	SOT89	1000 Tape&Reel
^†117-XXV	SOT223	2500 Tape&Reel
^†117R-XX	TO252	2500 Tape&Reel

Note: XX stands for Output Voltage

\$ % L S R O D U / L Q H D U 5 H J X O D W R U

Block Diagram



Pin Configuration

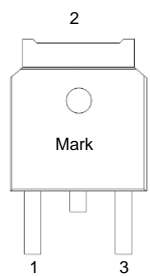
SOT223 (Top View)



7DEOH 6 61117 (SOT223 PKG)

PIN NO.	PIN NAME	FUNCTION
1	VSS/ADJ	VSS/ADJ pin
2	VOUT	Output voltage pin
3	VIN	Input voltage pin
4	VOUT	Output voltage pin

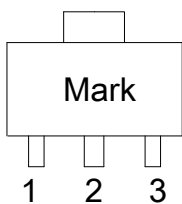
TO252 (Top View)



7DEOH 6 61117 (TO252 PKG)

PIN NO.	PIN NAME	FUNCTION
1	VSS/ADJ	VSS/ADJ pin
2	VOUT	Output voltage pin
3	VIN	Input voltage pin

627 7RS 9LHZ



7DEOH 6 61117 (627 PKG)

PIN NO.	PIN NAME	FUNCTION
1	VSS/ADJ	VSS/ADJ pin
2	VOUT	Output voltage pin
3	VIN	Input voltage pin

§ % L S R O D U / L Q H D U 5 H J X O D W R U

Absolute Maximum Ratings

Max Input Voltage V_{in} \leq 18V
 Max Operating Junction Temperature (T_j) \leq 150
 Storage Temperature (T_s) \leq -55 ~ 150
 Lead Temperature & Time \leq 260 10S

&DXW\ (R Q HG WKHVH OLPLWV WR GDPDJH WR WKH GHYLFH ([SRVXUH WR DEVRO
 GHYLFH UHOLDELOLW\

Electrical Characteristics

$T_A=25^\circ\text{C}$, unless otherwise noted.

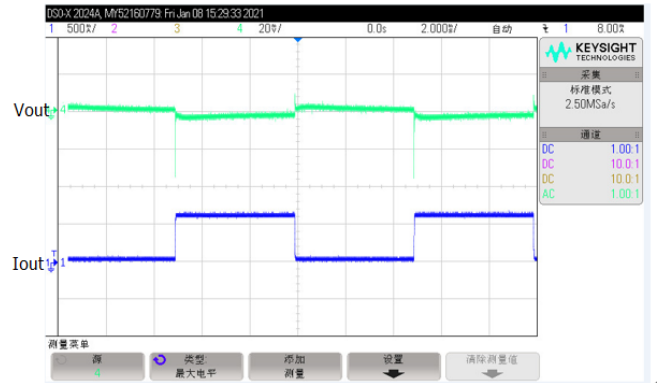
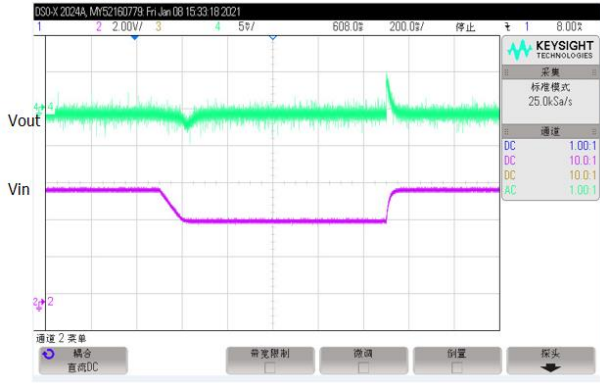
Symbol	Parameter	Conditions	Min	Typ	Max	Unit
9LQ	, \$ X W Y R					9
9UHI	5HIHUCH YROWD	66 \$ M P \$ 0, R X W \$ 9LQ 9				9
9RXW	2XWSXW Y	66 9 0, R X W \$ 9LQ 9				9
		66 9 0, R X W \$ 9LQ 9				9
		66 9 0, R X W \$ 9LQ 9				9
		66 9 0, R X W \$ 9LQ 9				9
		66 9 0, R X W \$ 9LQ 9				9
		66 9 0, R X W \$ 9LQ 9				9
		66 9 0, R X W \$ 9LQ 9				9

, 9RX	/LQH UHJXODW	66 9 , RXW \$ P 909LQ 9				P9
		66 9 , RXW \$ P 909LQ 9				P9
		66 \$ '- , RXW \$ P 909LQ 9				P9
		66 9 , RXW \$ P 909LQ 9				P9
		66 9				P9

\$ % L S R O D U / L Q H D U 5 H J X O D W R U

/ L Q H U D Q V L H Q W 5 H V S R Q V H

/ R D Ø U D Q V L H Q W 5 H V S R Q V H



Marking Information

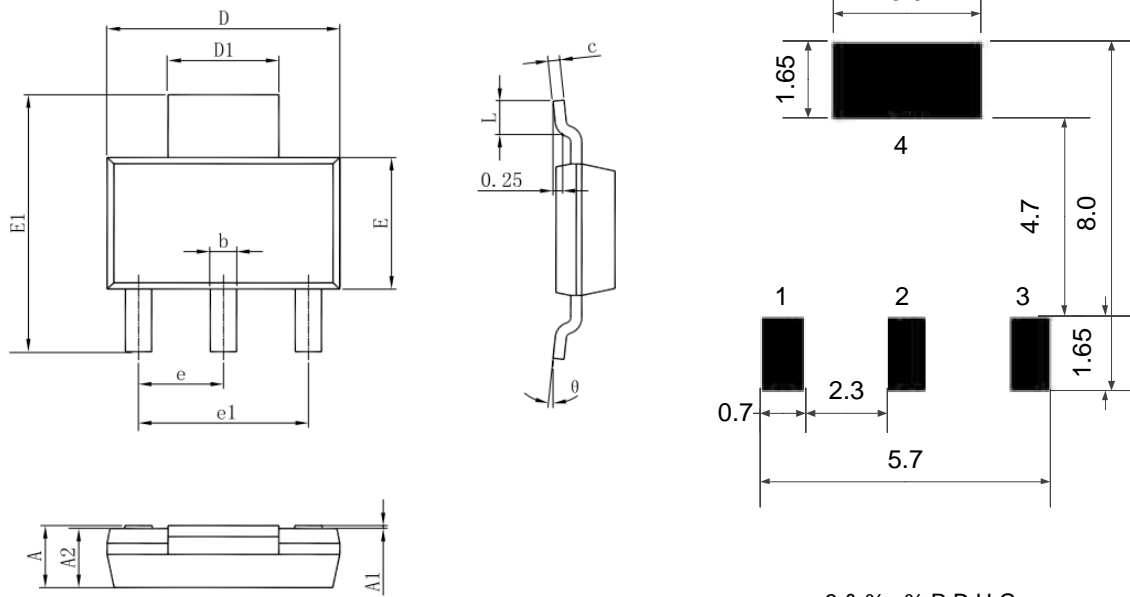
Marking	Designator	Description
1117 XXS μ WW	1117	W μ s }
	XX	Output Voltage(1.2~12.0V)
	S	Order NO
	YWW	d K

E } s XX_ • s v • (} CE } μ s % μ s All ages can be specially customized

\$ %LSRODU /LQH DU 5HJXODWRU

Package Information

SOT-223 PACKAGE OUTLINE DIMENSIONS

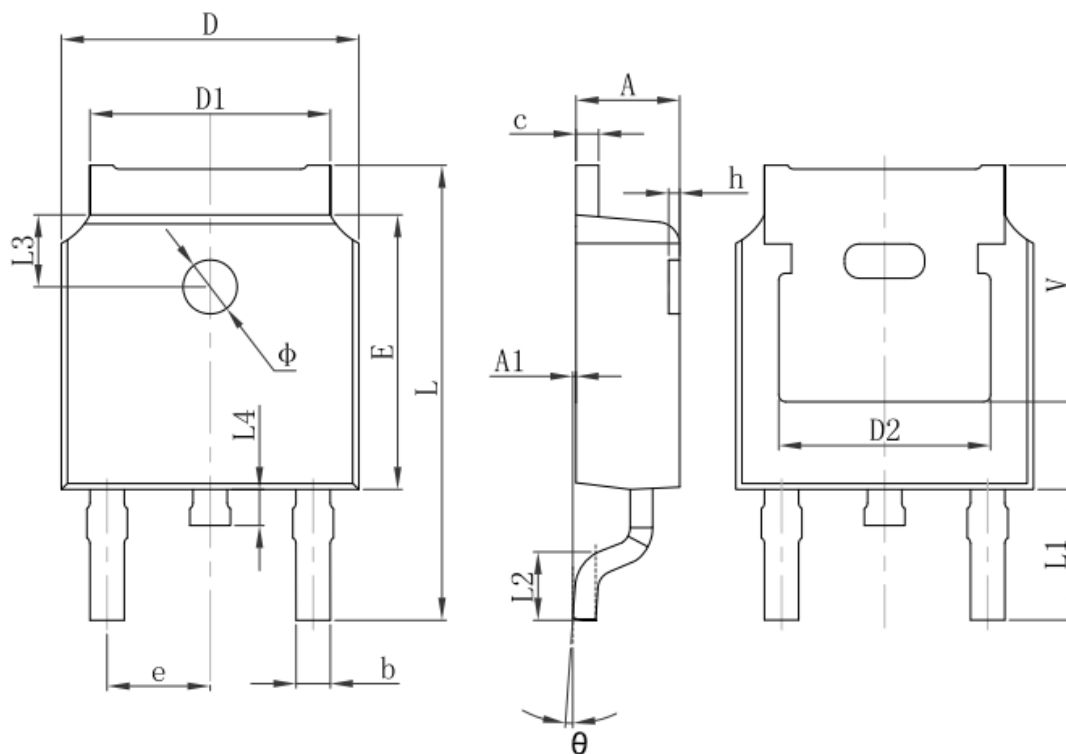


3 & % % RDUG

Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.520	1.800	0.060	0.071
A1	0.000	0.100	0.000	0.004
A2	1.500	1.700	0.059	0.067
b	0.660	0.820	0.026	0.032
c	0.250	0.350	0.010	0.014
D	6.400	6.600	0.252	0.260
D1	2.900	3.100	0.114	0.122
E	3.300	3.700	0.130	0.146
E1	6.830	7.070	0.269	0.278
e	2.300(BSC)		0.091(BSC)	
e1	4.500	4.700	0.177	0.185
L	0.900	1.150	0.035	0.045
theta	0°	10°	0°	10°

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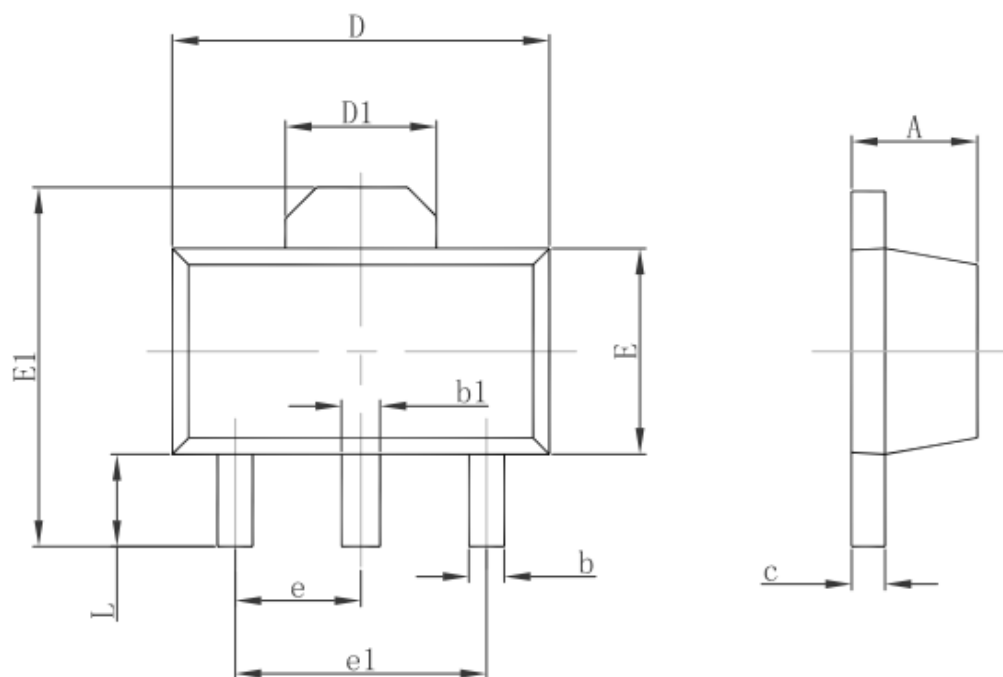
TO-252-2L PACKAGE OUTLINE DIMENSIONS



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	2.200	2.400	0.087	0.094
A1	0.000	0.127	0.000	0.005
b	0.660	0.860	0.026	0.034
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.		0.063 REF.	
L4	0.600	1.000	0.024	0.039
Φ	1.100	1.300	0.043	0.051
θ	0°	8°	0°	8°
h	0.000	0.300	0.000	0.012
V	5.350 REF.		0.211 REF.	

\$ % L S R O D U / L Q H D U 5 H J X O D W R U

3-pin SOT89 Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	1.400	1.600	0.055	0.063
b	0.320	0.520	0.013	0.020
b1	0.400	0.580	0.016	0.023
c	0.350	0.440	0.014	0.017
D	4.400	4.600	0.173	0.181
D1	1.550 REF.		0.061 REF.	
E	2.300	2.600	0.091	0.102
E1	3.940	4.250	0.155	0.167
e	1.500 TYP.		0.060 TYP.	
e1	3.000 TYP.		0.118 TYP.	
L	0.900	1.200	0.035	0.047