

**/ Descriptions**

TO-252  
Voltage Regulator in a TO-252 Plastic Package.

**/ Features**

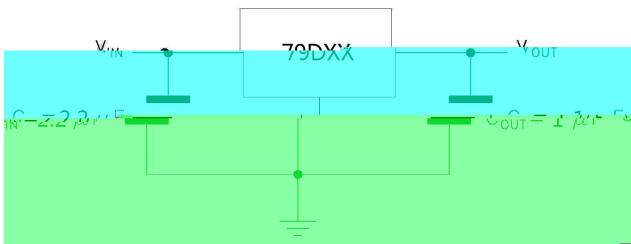
1.5A, AEC-Q100

3-Terminal regulators ,output current up to 1.5A, internal thermal overload protection and short-circuit limiting, Qualified to AEC-Q100 Standards for High Reliability, HF Product.

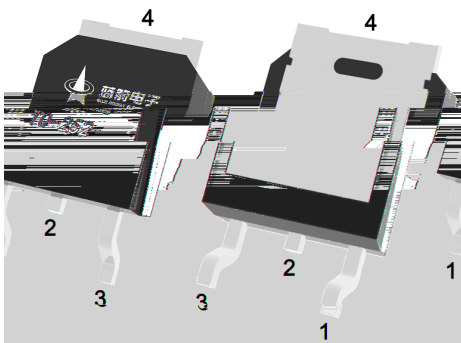
**/ Applications**

Voltage Regulator, Meet the stringent requirements of automotive applications.

**/ Equivalent Circuit or Application Circuit**



**/ Pinning**



PIN1 GND    PIN 2 4 IN    PIN 3 OUT

**/ Marking**

See Marking Instructions.

## / Absolute Maximum Ratings(Ta=25 )

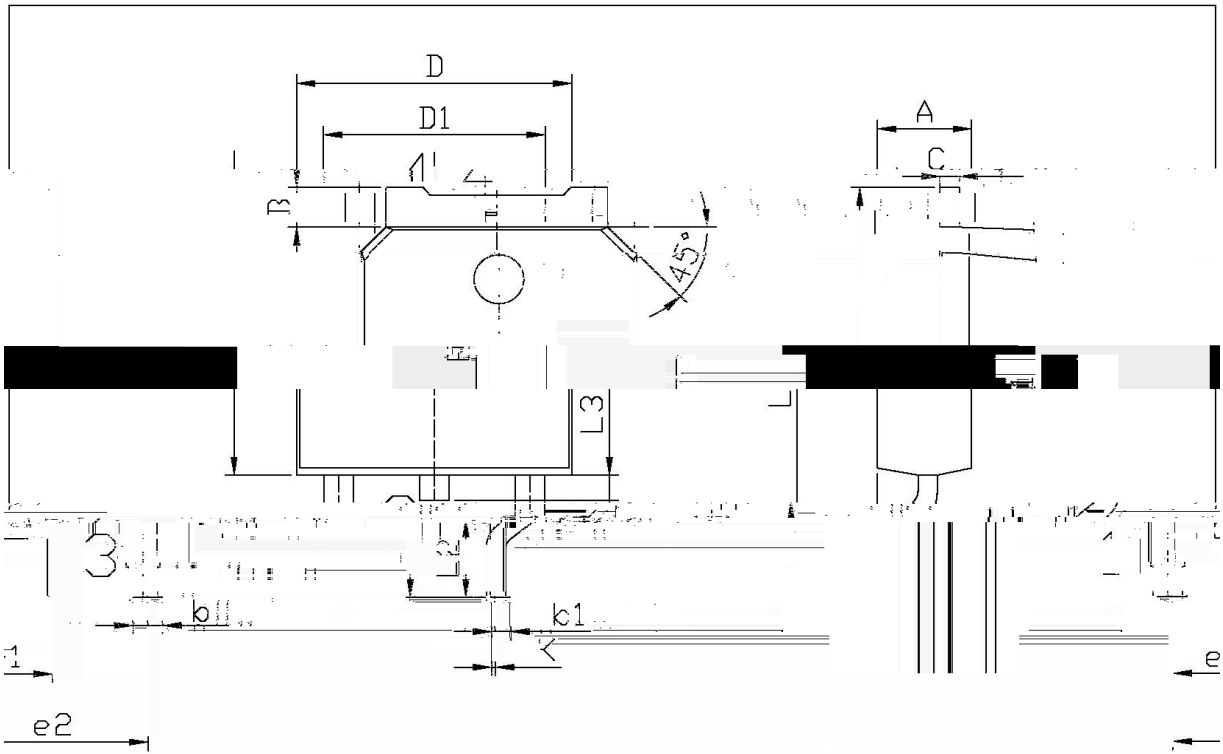
Parameter	Symbol	Rating	Unit
Input voltage	$V_i$	-35	V
Thermal Resistance Junction-Ambient	$R_{JA}$	105	/W
Thermal Resistance Junction-Case	$R_{JC}$	10	/W
Operating Junction Temperature Range	$T_{OPR}$	-40 125	
Storage temperature range	$T_{stg}$	-65 150	

## / Electrical Characteristics

(Ta=25  $V_i=-23V, I_o=500mA$   $C_i=2.2 F, C_o=1 F$ , unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Output voltage	$V_o$	$T_j=25$	-14.4	-15.0	-15.6	V
		$I_o=5mA\sim 1A$ $P_o 15W$ $V_i=-17V\sim -30V$	-14.25	-15.0	-15.75	V
Load Regulation	$V_o$	$T_j=25$ $I_o=5.0mA\sim 1.5A$			300	mV
		$T_j=25$ $I_o=250mA\sim 750mA$			150	mV
Line regulation	$V_o$	$T_j=25$ $V_i=-17.5V\sim -30V$			300	mV
		$T_j=25$ $V_i=-20V\sim -26V$			150	mV
Quiescent Current	$I_q$	$T_j=25$			6.0	mA
Quiescent Current Change	$I_q$	$V_i=-17.5V\sim -30V$			1.0	mA
		$I_o=5mA\sim 1A$			0.5	mA
Output Voltage Drift	$V_o/ T$	$I_o=5mA$		1.5		mV/
Output Noise Voltage	$V_N$	$B=10Hz\sim 100KHz$ $T_j=25$		250		$\mu V$
Supply Voltage Rejection	SVR	$V_i=10V$ $f=120Hz$	54			dB
Dropout Voltage	$V_d$	$I_o=1A$ $T_j=25$		2.0		V
Short Circuit Current	$I_{sc}$	$V_i=-35V$ $T_j=25$		10		mA
Short Circuit Peak Current	$I_{scp}$	$T_j=25$		2.1		A

/ Package Dimensions

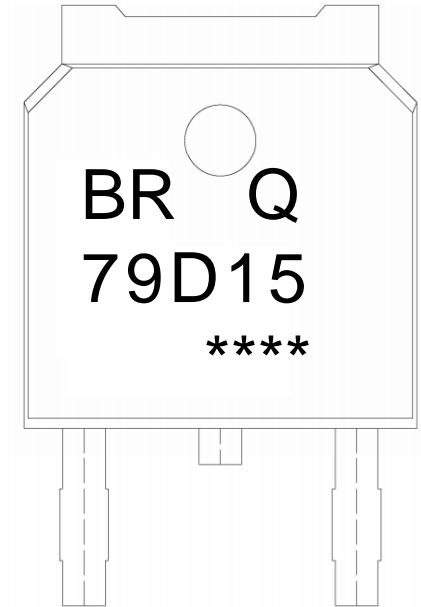


单位: mm

Symbol	Dimensions In Millimeters		Symbol	Dimensions In Millimeters	
	Min.	Max.		Min.	Max.
35	6.25		A	2.20	2.40
24	2.34		B	0.95	1.25
73	9.85	10.35	b1	0.45	0.55
			L3	0.60	0.90
			D1	6.45	6.75

□ = 252

/ Marking Instructions



BR

Q

79D15

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Note:

BR: Company Code

Q: Automobile halogen-free product Code

79D15: Product Type

\*\*\*\*: Lot No. Code, code change with Lot No

( ) /


**Note:**

- 1            150 200            60 120sec;    1.Preheating:150~200 , Time:60~120sec.
- 2            255±5                    5±0.5sec;    2.Peak Temp.:255±5 , Duration:5±0.5sec.
- 3                            2 10 /sec.            3. Cooling Speed: 2~10 /sec.

**/ Resistance to Soldering Heat Test Conditions**

260±5                    10±1 sec.                    Temp.:260±5                    Time:10±1 sec

**/ Packaging SPEC.**

/ REEL

Package Type	Units					Dimension (unit mm <sup>3</sup> )		
	Units/Reel	Reels/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Reel	Inner Box	Outer Box
TO-252	2,e/TT8	Units/Inner Box	18	refBT/TT	358n5f95fBT	30,/TT	35TT	358n886

Tc13f119.49