

TO-252

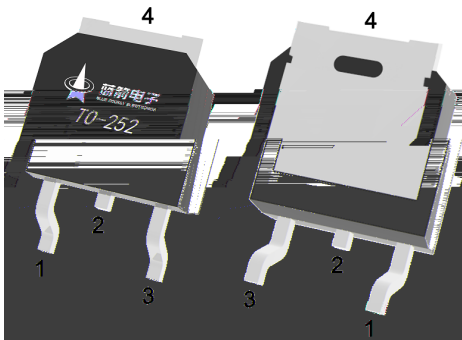
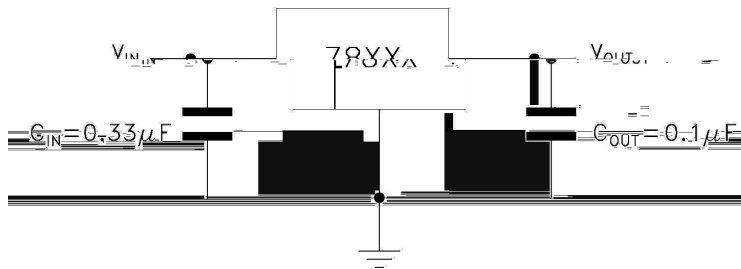
Voltage Regulator in a TO-252 Plastic Package.

1.5A,

AEC-Q100

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

Voltage Regulator, Meet the stringent requirements of automotive applications.



PIN1 IN

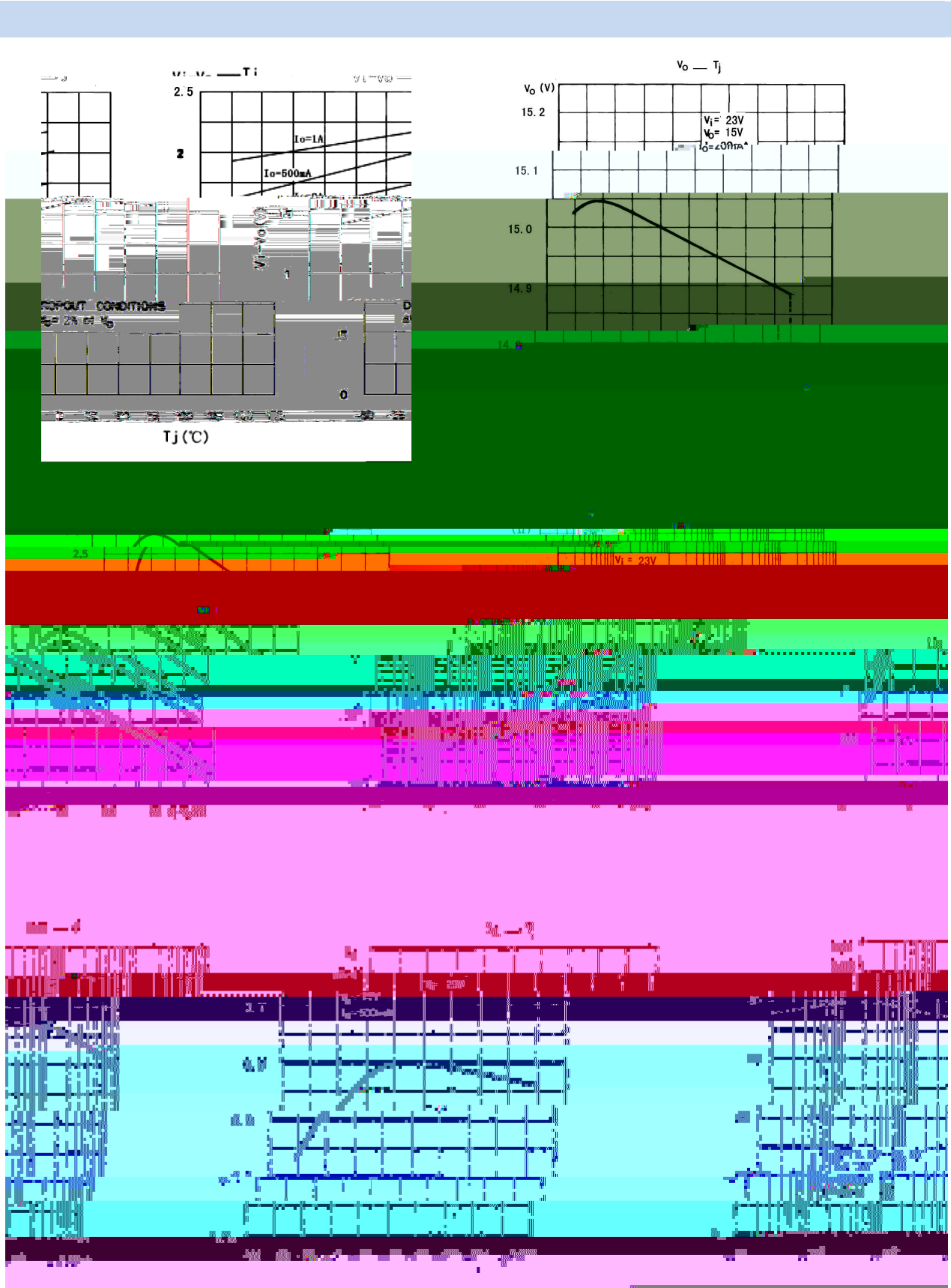
PIN 2 4 GND

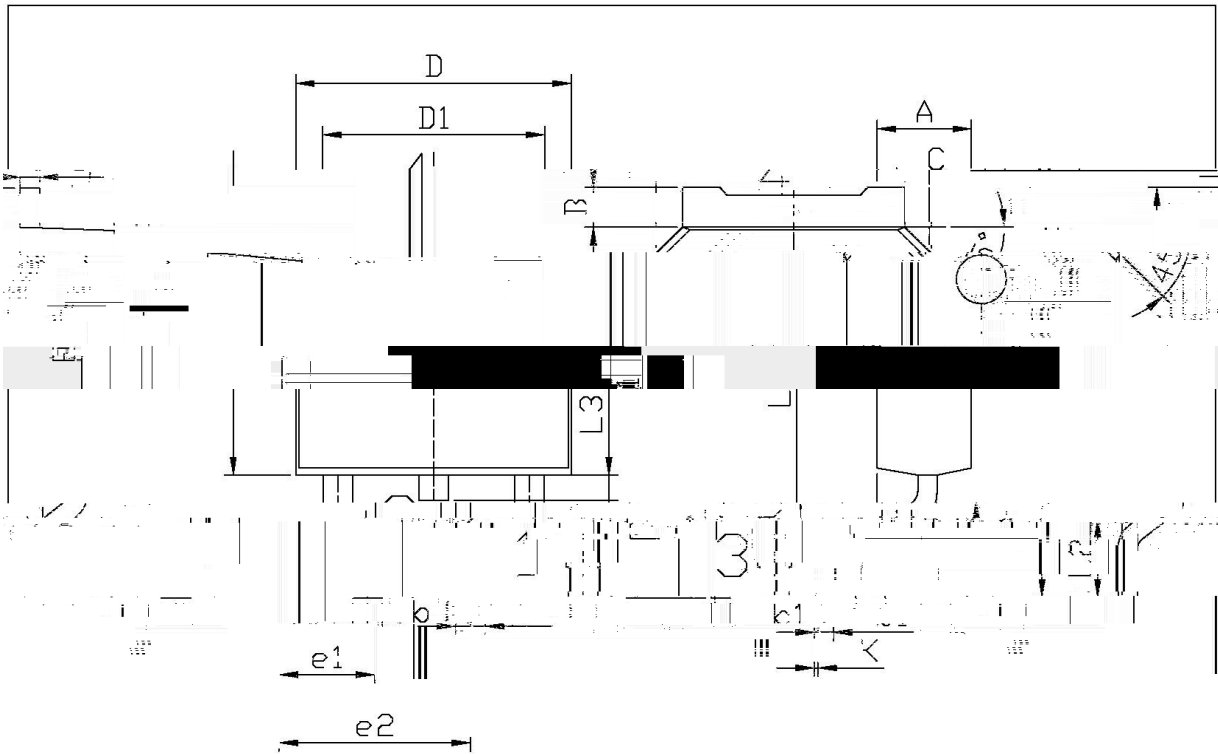
PIN 3 OUT

See Marking Instructions.

Parameter	Symbol	Rating	Unit
Input Voltage Difference	V_I	35	V
Power Dissipation	P_D	Internally Limited	W
Junction-to-Ambient	R_{JA}	105	/W
Junction-to-Case	R_{JC}	10	/W
Operating Temperature Range	T_{OPR}	-40 125	
Storage temperature range	T_{stg}	-65 150	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Output Voltage	V_o	$T_j=25$	14.4	15	15.6	V
		$V_i=17.5V-30V$ $I_o=5.0mA-1.0A$ P_o 15W	14.25	15	15.75	
Load Regulation	V_{Load}	$T_j=25$ $I_o=5.0mA-1.5A$			300	mV
		$T_j=25$ $I_o=250mA-750mA$			150	
Line Regulation	V_{Line}	$T_j=25$ $V_i=17.5V-30V$			300	mV
		$T_j=25$ $V_i=20V-26V$			150	
Quiescent Current	I_q	$T_j=25$			8.0	mA
Quiescent Current Change	I_q	$V_i=17.5V-30V$			1.0	mA
		$I_o=5.0mA-1.0A$			0.5	mA
Output Voltage Drift	V_o/ T	$I_o=5.0mA$		-1.0		mV/
Output Noise Voltage	eN	B=10Hz-100KHz $T_j=25$		90		$\mu V/V_o$
Supply Voltage Rejection	SVR	$V_i=18.5V-28.5V$ $f=120Hz$	54			dB
Dropout Voltage	V_d	$I_o=1A$ $T_j=25$		2.0		V
Output Resistance	R_o	$f=1.0KHz$		19		m
Short Circuit Current	Isc	$V_i=35V$ $T_j=25$		0.23		A
Short Circuit Peak Current	Iscp	$T_j=25$		2.2		A

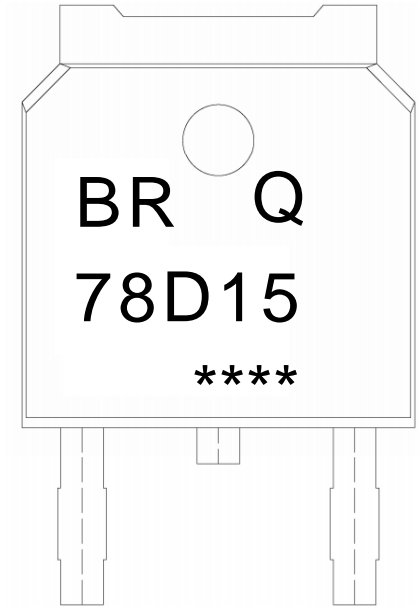




单位: mm

Symbol	Dimensions In Millimeters		Symbol	Dimensions In Millimeters	
	Min	Max		Min	Max
5.95	6.25		A	2.20	2.40
2.24	2.34		B	0.95	1.25
12.40	13.40		b	0.70	0.90
9.85	10.35		b1	0.45	0.55
0.60	0.90		D	6.45	6.75
0.00	0.10		D1	5.30	5.50

TO-25



BR

Q

78D15

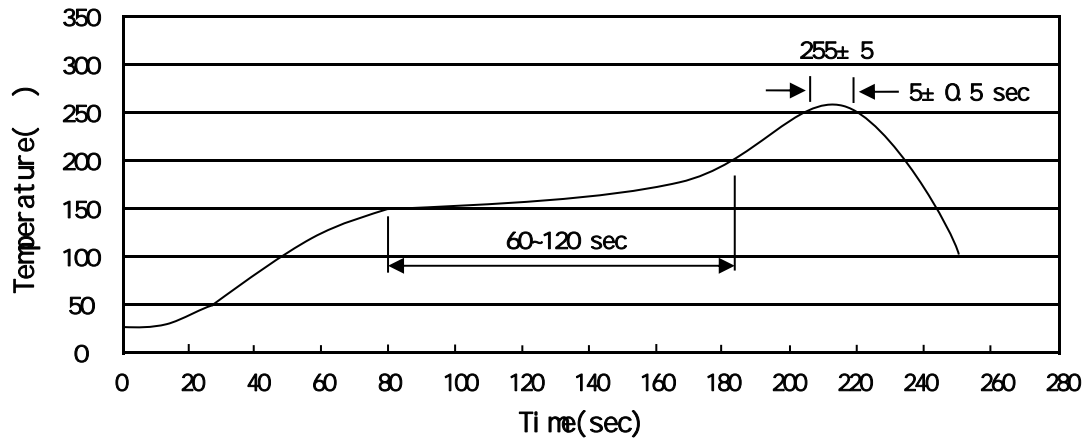
Note:

BR: Company Code

Q: Automobile halogen-free product Code

78D15: 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. |

260±5

10±1 sec.

Temp.:260±5

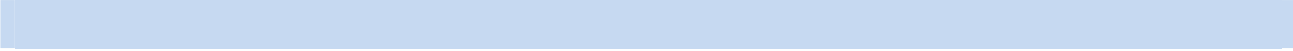
Time:10±1 sec

/ REEL

Package Type	Units					Dimension (unit mm ³)		
	Units/Reel	Reels/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Reel	Inner Box	Outer Box
TO-252	2,500	2	5,000	6	30,000	13 x16	360x360x50	380x335x366

/ TUBE

Package Type	Units					Dimension (unit mm ³)		
	Units/Tube	Tubes/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Tube	Inner Box	Outer Box
TO-251/252	75	48	3,600	5	18,000	526x20.5x5.25	555x164x50	575x290x180



PCB