

**/ Descriptions**

TO-263 Voltage Regulator in a TO-263 Plastic Package.

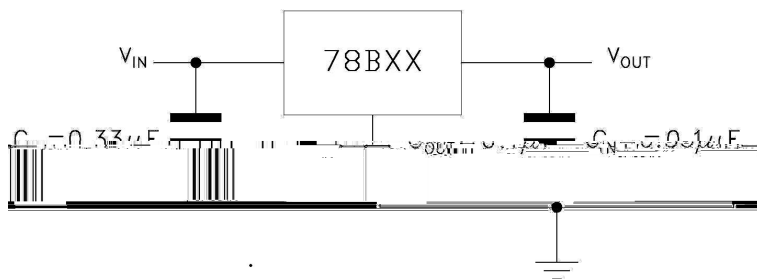
**/ Features**

1.5A,  
3-Terminal regulators ,output current up to 1.5A, internal thermal overload protection and short-circuit limiting.

**/ Applications**

Voltage Regulator.

**/ Equivalent Circuit or Application Circuit**



**/ Pinning**



PIN1 IN      PIN 2 4 GND      PIN 3 OUT

**/ Marking**

See marking instructions.

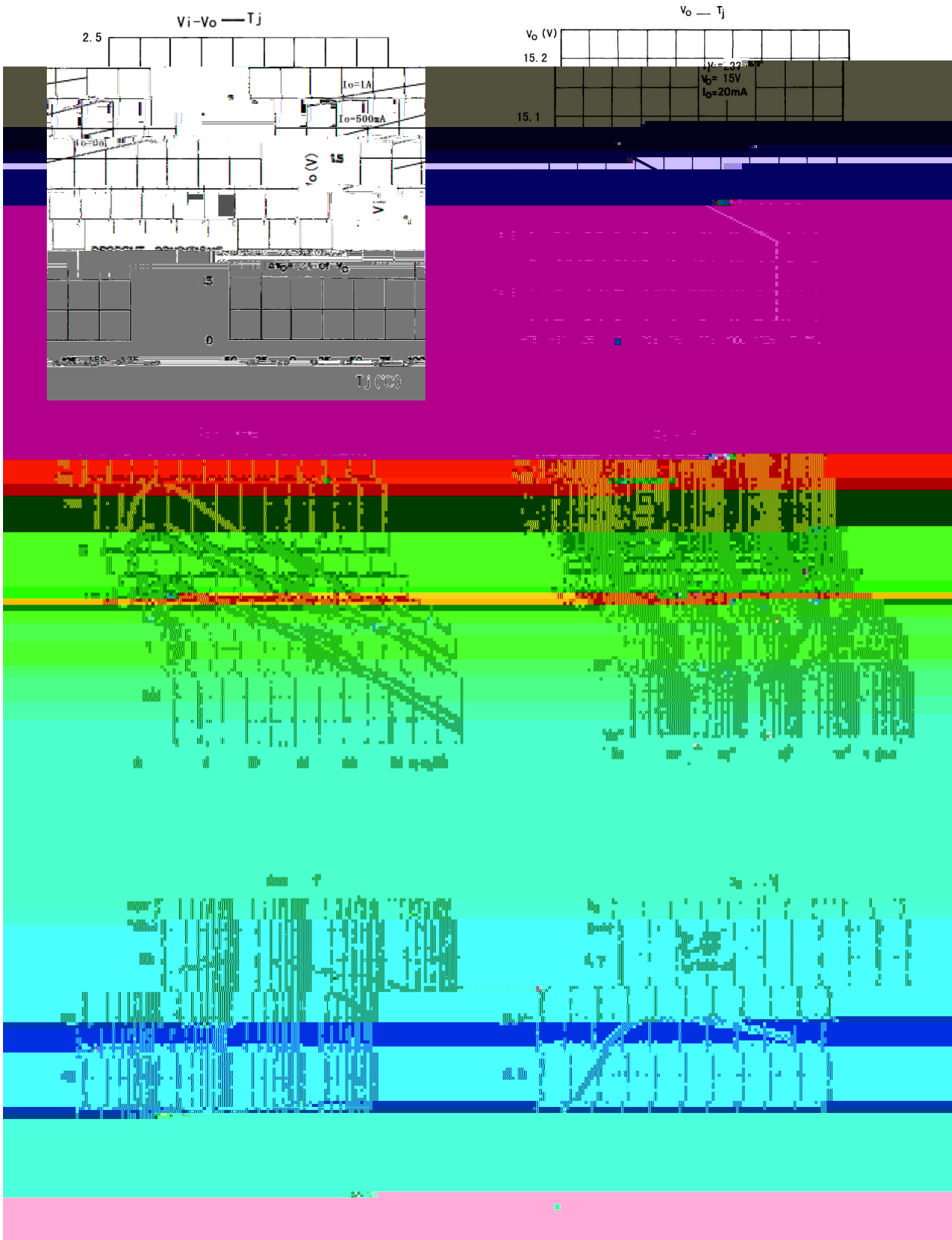
**/ Absolute Maximum Ratings(Ta=25 )**

Parameter	Symbol	Rating	Unit
Input voltage	$V_i$	35	V
Thermal Resistance Junction to Ambient	$R_{JA}$	50	/W
Thermal Resistance Junction to Case	$R_{JC}$	5.0	/W
Operating Temperature Range	$T_{OPR}$	0 125	
Storage Temperature Range	$T_{stg}$	-65 150	

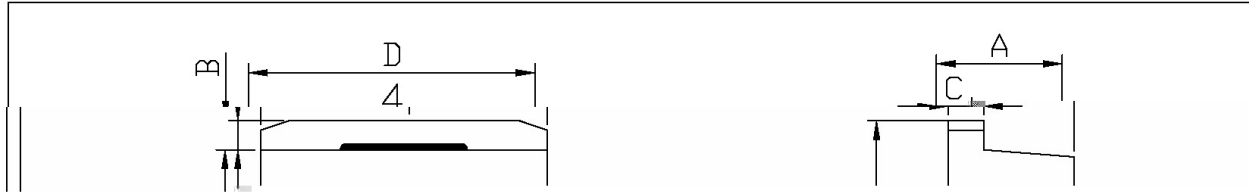
**/ Electrical Characteristics(Ta=25  $V_i=10V, I_o=500mA$  unless otherwise specified)**

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Output voltage	$V_o$	$T_j=25$	14.4	15	15.6	V
		$V_i=17.5V-30V$ $I_o=5.0mA-1.0A$ PD 15W	14.25	15	15.75	V
Load Regulation	$V_o$	$T_j=25$ $I_o=5.0mA-1.5A$			300	mV
		$T_j=25$ $I_o=250mA-750mA$			150	mV
Line regulation	$V_o$	$T_j=25$ $V_i=17.5V-30V$			300	mV
		$T_j=25$ $V_i=20V-26V$			150	mV
Quiescent Current	$I_d$	$T_j=25$			8.0	mA
Quiescent Current Change	$I_d$	$V_i=17.5V-30V$			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
Ripple Rejection	Vd	$I_o=1A$ $T_j=25$		2.0		V
Output Noise Voltage	Ro	f=1.0KHz		19		m
Short Circuit Current	Isc	$V_i=35V$ $T_j=25$		0.23		A
Peak Current	Iscp	$T_j=25$		2.2		A

/ Electrical Characteristic Curve



/ Package Dimensions

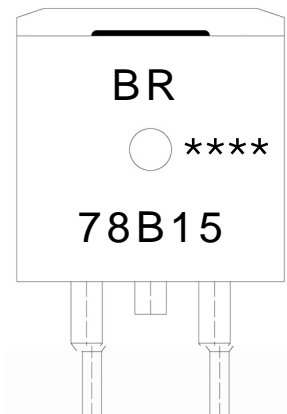


单位: mm

Symbol	Min	Max	Symbol	Min	Max
A	4.30	4.70	E	9.00	9.40
B	1.00	1.40	e1	2.34	2.74
b	0.70	0.90	e2	4.88	5.28
b1	1.15	1.35	L1	15.00	16.00
b2	0.40	0.60	L2	2.24	2.54
C	1.20	1.40	L3	1.20	1.40
D	9.80	10.20			

T.11-263

/ Marking Instructions



BR

78B15

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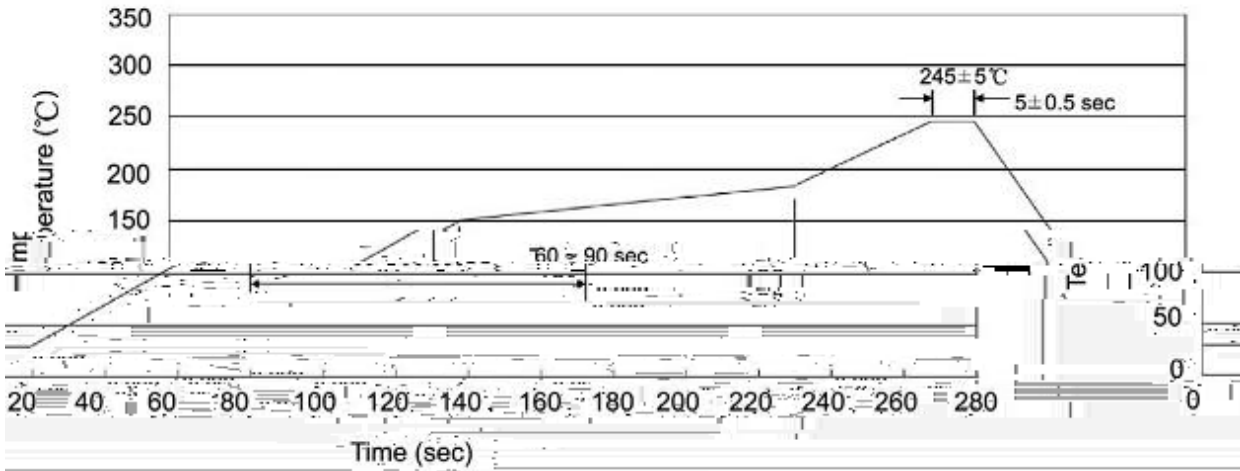
Note:

BR: Company Code.

78B15: Product Type.

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

( ) /



Note:

- |   |       |     |       |          |   |
|---|-------|-----|-------|----------|---|
| 1 | 150   | 180 | 60    | 90sec;   | 1.Preheating:150~180 , Time:60~90sec.   |
| 2 | 245±5 |     | 5±0.5 | sec;     | 2.Peak Temp.:245±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 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm <sup>3</sup> )		
	Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Reel	Inner Box 盒	Outer Box 箱
TO-263	800	1	800	5	4,000	13 ×24	360×360×50	385×257×392

/ TUBE

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm <sup>3</sup> )		
	Units/Tube 只/套管	Tubes/Inner Box 套管/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Tube 套管	Inner Box 盒	Outer Box 箱
TO-263	50	20	1,000	5	5,000	532×33×7.0	555×164×50	575×290×180

**/ Notices**