

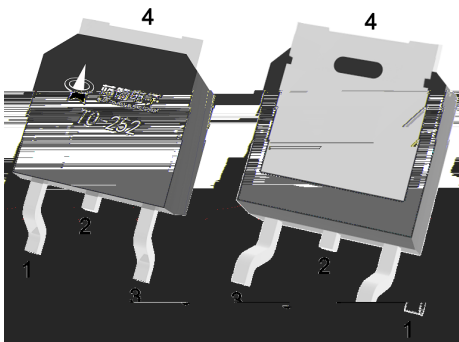
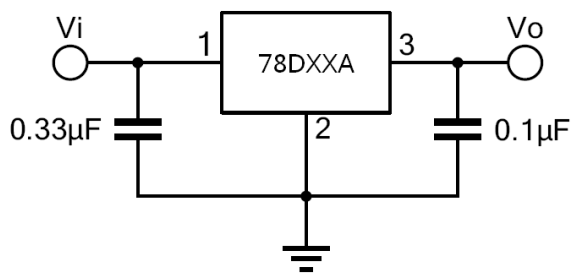
TO-252

Voltage Regulator in a TO-252 Plastic Package.

1.0A,

3-Terminal regulators ,output current up to 1.0A, internal thermal overload protection and short-circuit limiting, HF Product.

Voltage Regulator.

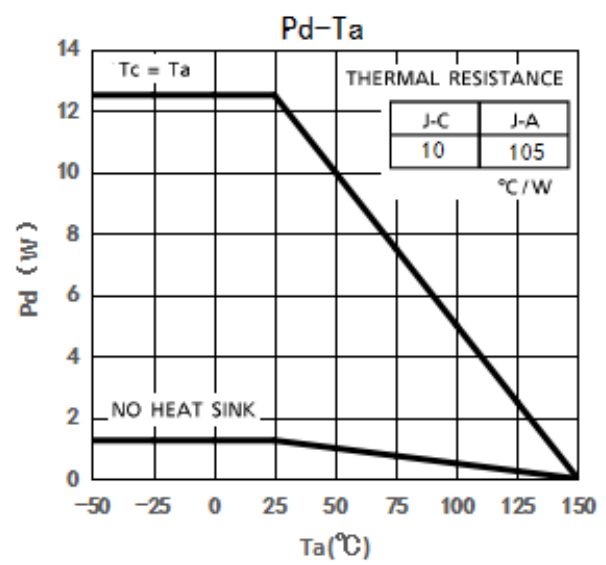
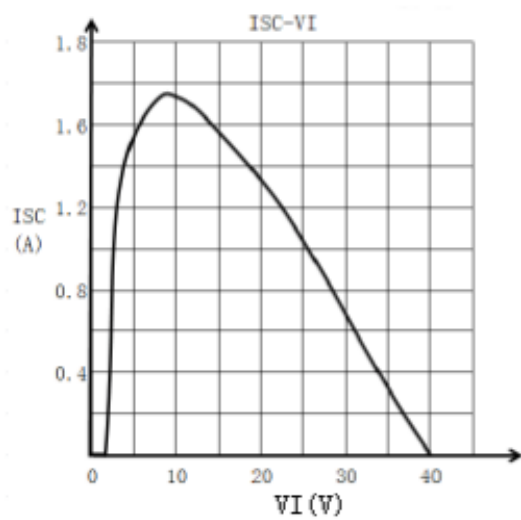
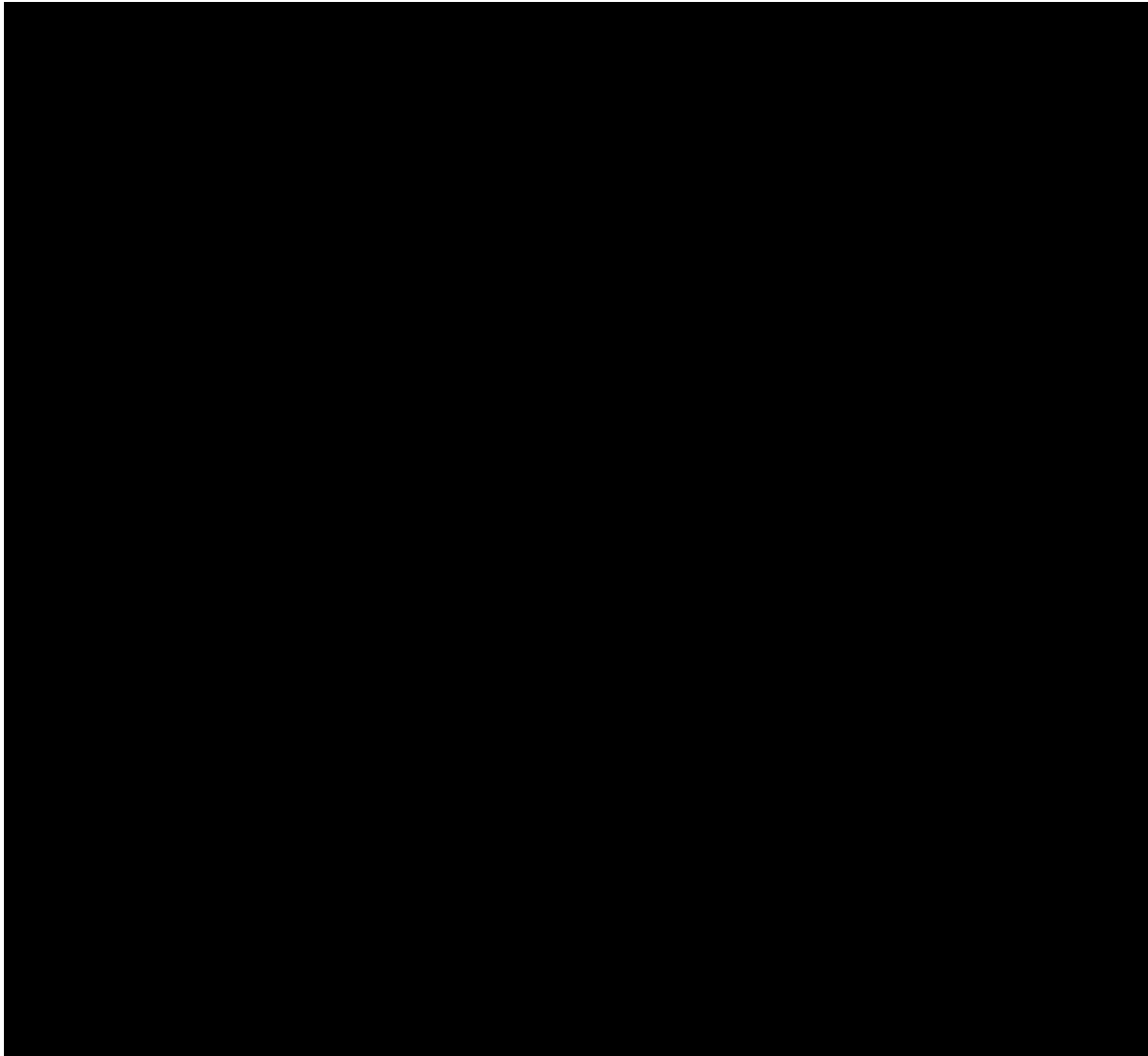


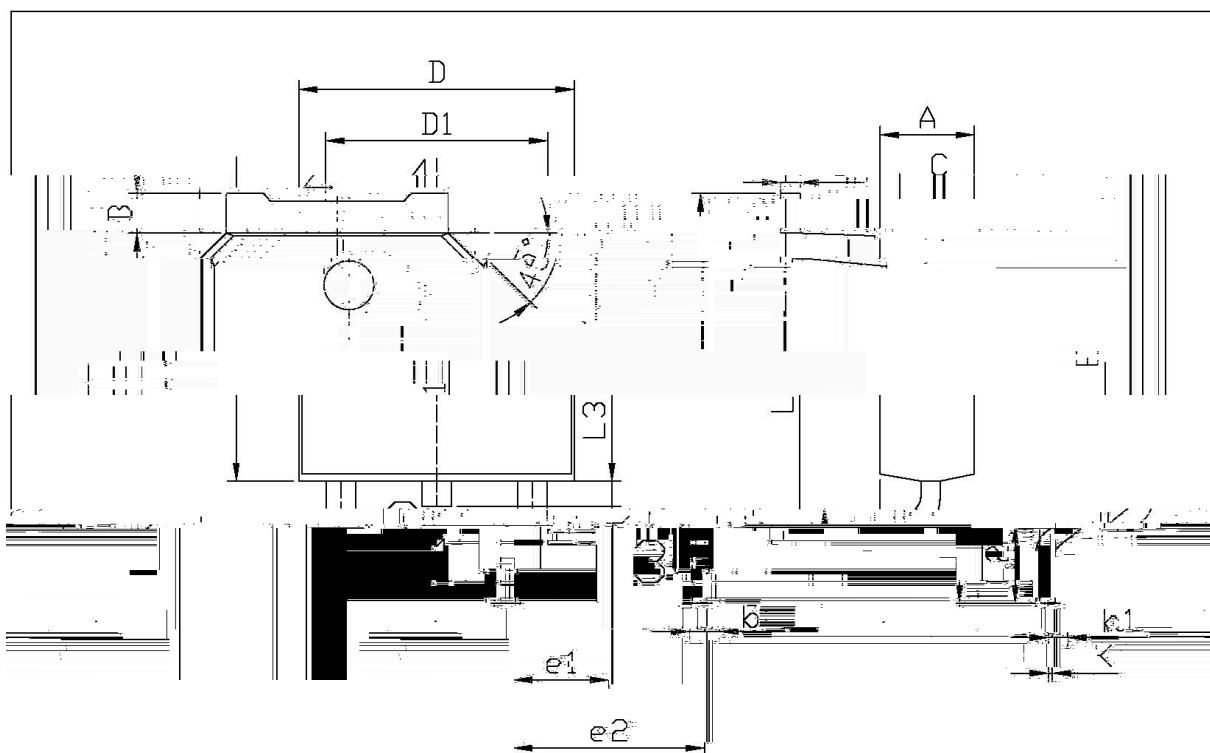
PIN1 IN PIN 2 4 GND PIN 3 OUT

See Marking Instructions.

Parameter	Symbol	Rating	Unit
Input voltage	V_I	17.5~35	V
Power Dissipation	P_D	Internally Limited	W
Thermal Resistance Junction-ambient	$R_{\theta JA}$	105	/W
Thermal Resistance Junction-case	$R_{\theta JC}$	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
		$V_i=17.5V\sim 30V$ $I_o=5mA\sim 1.0A$ $P_D\leq 15W$	14.25	15	15.75	V
Load Regulation	V_{Load}	$T_j=25$ $I_o=5mA\sim 1.0A$			250	mV
		$T_j=25$ $I_o=250mA\sim 750mA$			125	mV
Line Regulation	V_{Line}	$T_j=25$ $V_i=17.5V\sim 30V$			250	mV
		$T_j=25$ $V_i=20V\sim 26V$			125	mV
Quiescent Current	I_q	$T_j=25$			8.0	mA
Quiescent Current Change	I_q	$V_i=17.5V\sim 30V$			1.0	mA
		$I_o=5mA\sim 1.0A$			0.5	mA
Output Voltage Drift	V_O / T	$I_o=5mA$ $T_j=0\sim 125$		-1.0		mV/
Output Noise Voltage	eN	B=10Hz~100KHz $T_j=25$		10		$\mu V/V_O$
Supply Voltage Rejection	SVR	$V_i=18.5V\sim 28.5V$ $f=120Hz$	54			dB
Dropout Voltage	V_d	$I_o=1.0A$ $T_j=25$		2.0		V
Output Resistance	R_o	$f=1KHz$		19		m Ω
Short Circuit Current	Isc	$V_i=35V$ $T_j=25$		200		mA

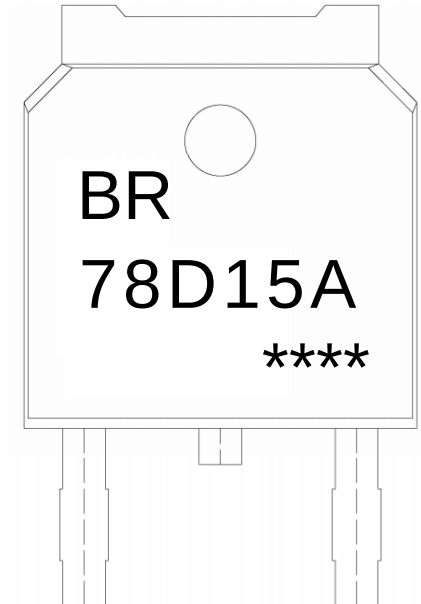




单位: mm

Symbol	Dimensions In Millimeters		Symbol	Dimensions In Millimeters	
	Min	Max		Min	Max
A	2.25	2.40	E	5.95	6.10
B	0.95	1.25	e1	2.24	2.40
b	0.70	0.90	e2	4.43	4.60
D1	0.45	0.55	L1	9.30	9.50
L2	1.70	2.00	L3	0.10	0.15
D	5.10	5.50	K	0.10	0.15

TQ-252



BR

78D15A

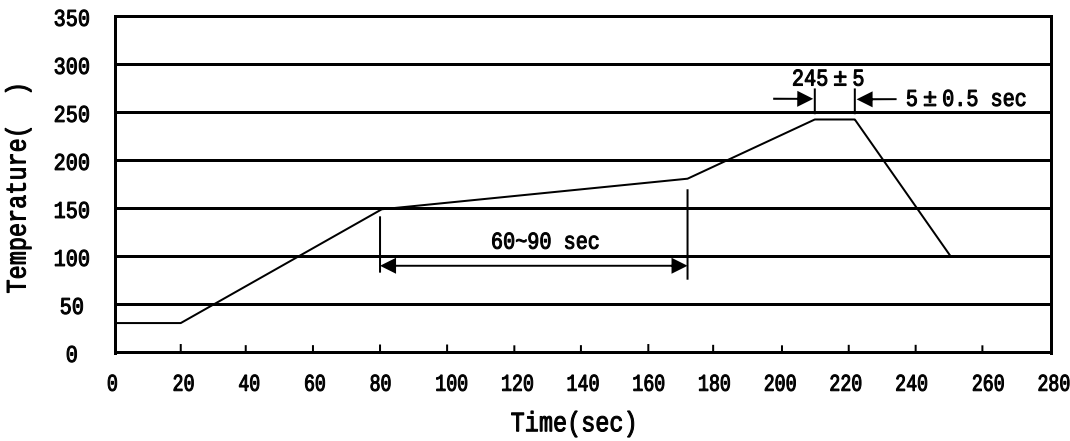
Note:

BR: Company Code

78D15A: Product Type

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

Temperature Profile for IR Reflow Soldering(Pb-Free)



Note:

- 1

150 180

60 90sec;

1.Preheating:150~180 , Time:60~90sec.
- 2

245 5

5 0.5sec;

2.Peak Temp.:245 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)		
TO-252	2,500	2	5,000	6	30,000	13 ×16	360×360×50	380×335×366

/ TUBE

Package Type	Units					Dimension (unit mm ³)		
TO-251/252	75	48	3,600	5	18,000	526×20.5×5.25	555×164×50	575×290×180

PCB