

/ Descriptions

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

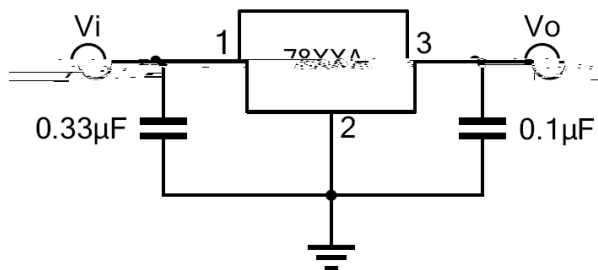
/ Features

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

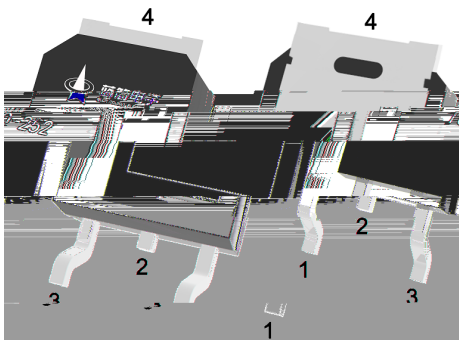
/ Applications

Voltage Regulator.

/ Equivalent Circuit or Application Circuit



/ Pinning



PIN1 IN PIN 2 4 GND PIN 3 OUT

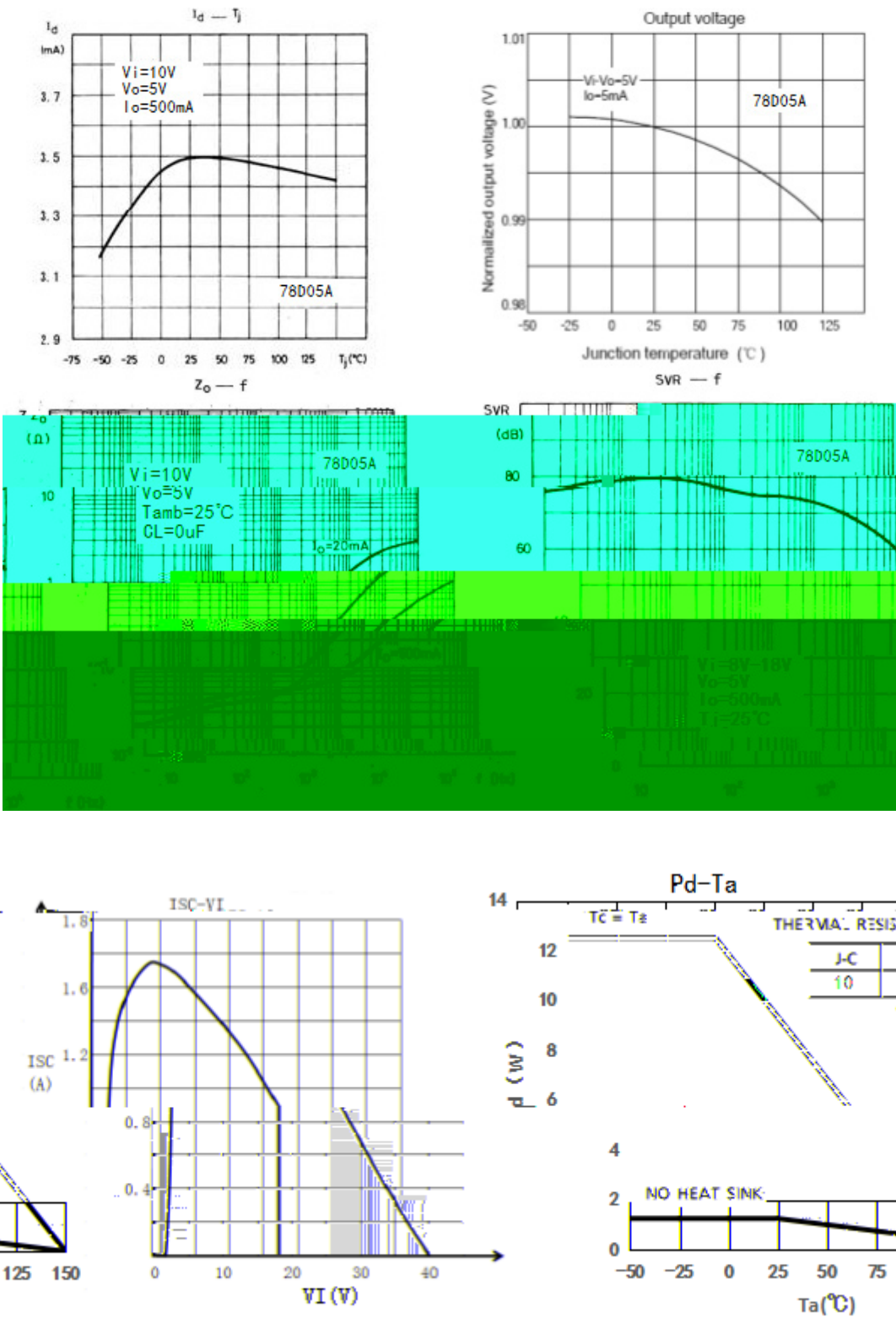
/ Marking

See Marking Instructions.

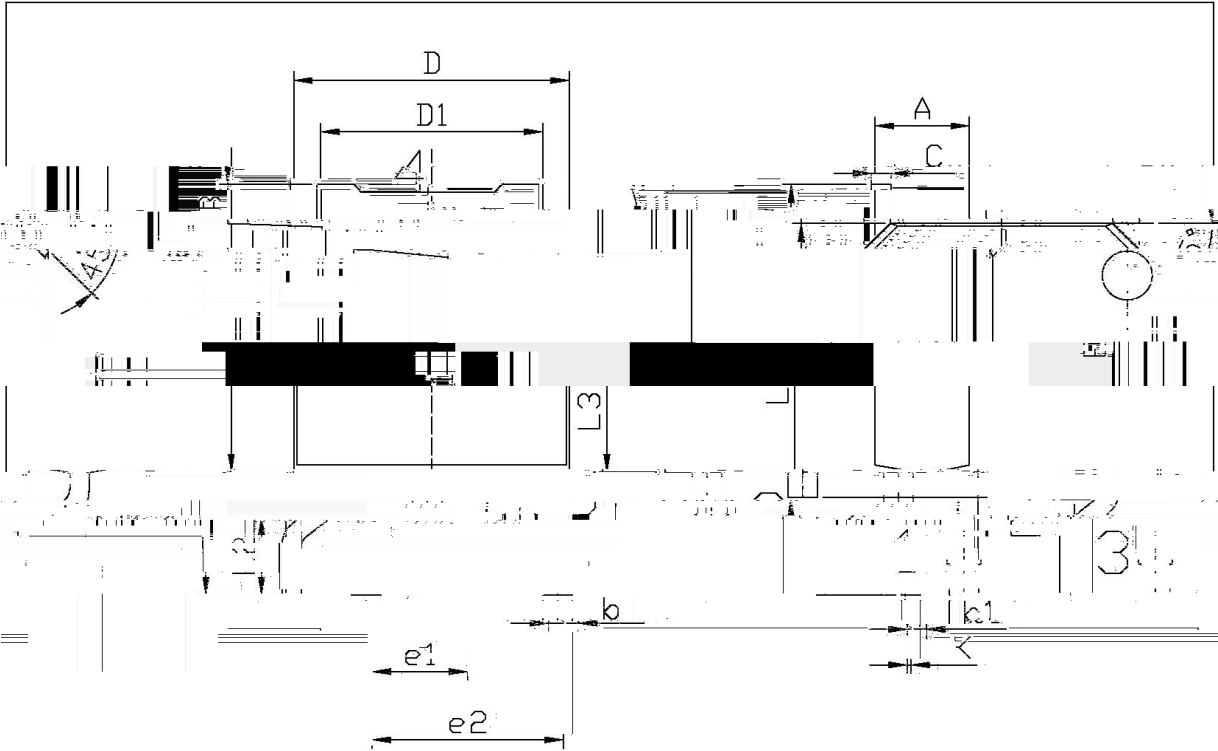
Parameter	Symbol	Rating	Unit
Input voltage	V_I	7~35	V
Power Dissipation	P_D	Internally Limited	W
Thermal Resistance Junction-Ambient	R_{JA}	105	/W
Thermal Resistance Junction-Case	R_{JC}	10	/W
Operating Temperature Range	T_{OPR}	-40 125	
Storage temperature range	T_{stg}	-65 150	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Output Voltage	V_O	$T_j=25$	4.8	5.0	5.2	V
		$V_i=7V\sim 20V$ $I_o=5mA\sim 1.0A$ P_D 15W	4.75	5.0	5.25	V
Load Regulation	V_{Load}	$T_j=25$ $I_o=5mA\sim 1.0A$			100	mV
		$T_j=25$ $I_o=250mA\sim 750mA$			50	mV
Line Regulation	V_{Line}	T				

/ Electrical Characteristic Curve



/ Package Dimensions



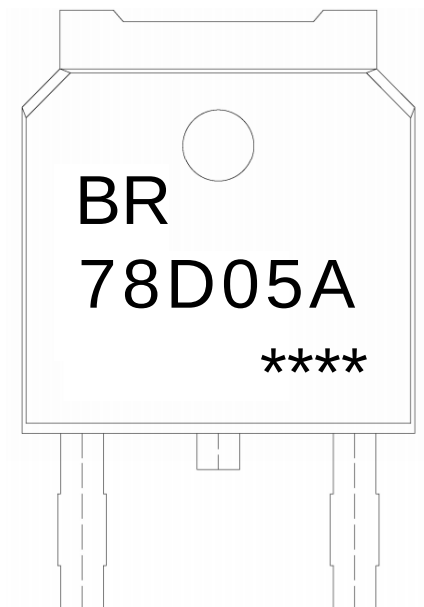
单位：mm

Symbol			Dimensions In Millimeters			Symbol			Dimensions In Millimeters		
			Min		Max				Min		Max
A			5.95		6.25	A			2.20		2.40
B			2.24		2.34	B			0.95		1.25
C			9.85		10.35	C			0.70		0.90
D			6.45		6.75	D			1.20		1.30
D1			5.10		5.50	D1			1.30		2.00
e1			0.60		0.90	e1			0.45		0.55
e2			0.00		0.10	e2			0.70		0.90
L1			0.45		0.55	L1			0.45		0.55
L3			0.45		0.55	L3			0.45		0.55
b			0.45		0.55	b			0.45		0.55
k1			0.45		0.55	k1			0.45		0.55

52

T0-25

/ Marking Instructions



BR

78D05A

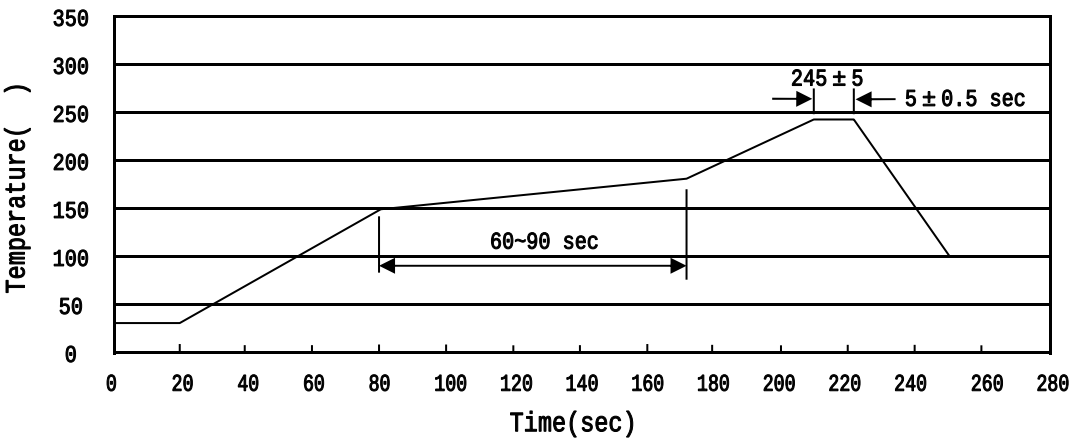
Note:

BR: Company Code

78D05A: 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.

/ 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 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 ×16	360×360×50	380×335×366

/ 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	526×20.5×5.25	555×164×50	575×290×180

/ Notices

PCB