

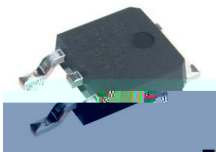
描述 / Descriptions

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

3-Terminal regulators ,output current up to 0.5A, internal thermal overload protection and short-circuit limiting.

Voltage Regulator.

内部等效电路/应用电路 / Equivalent Circuit or Application Circuit



PIN1 IN PIN 2 4 GND PIN 3 OUT

印章代码 / Marking

。 See Marking Instructions.

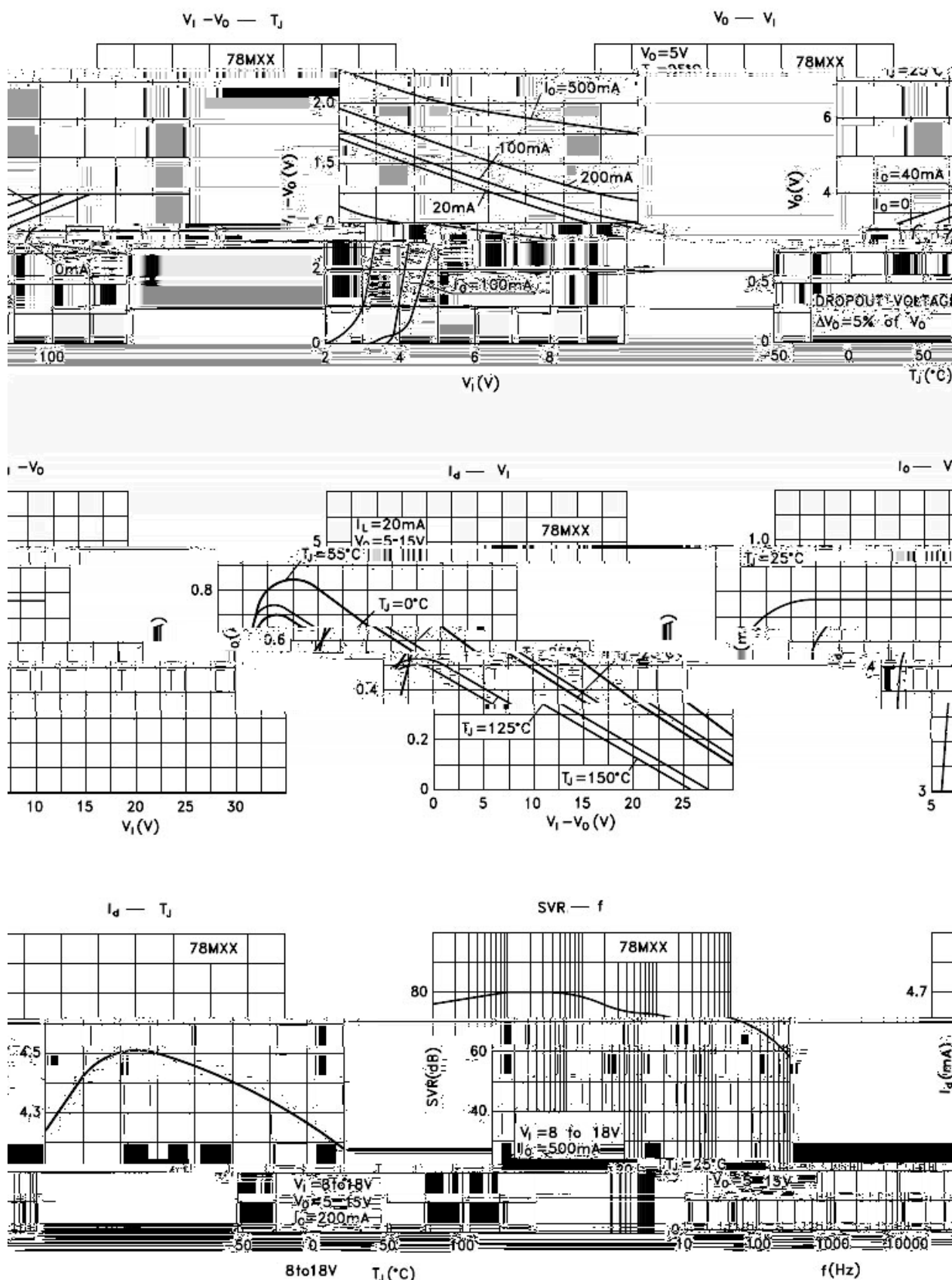
极限参数 / Absolute Maximum Ratings(Ta=25°C)

Parameter	Symbol	Rating	Unit
Input voltage	V_I	35	V
Thermal Resistance Junction-ambient	R_{JA}	100	°C/W
Thermal Resistance Junction-case	R_{JC}	8.0	°C/W
Operating Junction Temperature Range	T_{OPR}	0~125	°C
Storage temperature range	T_{stg}	-65~150	°C

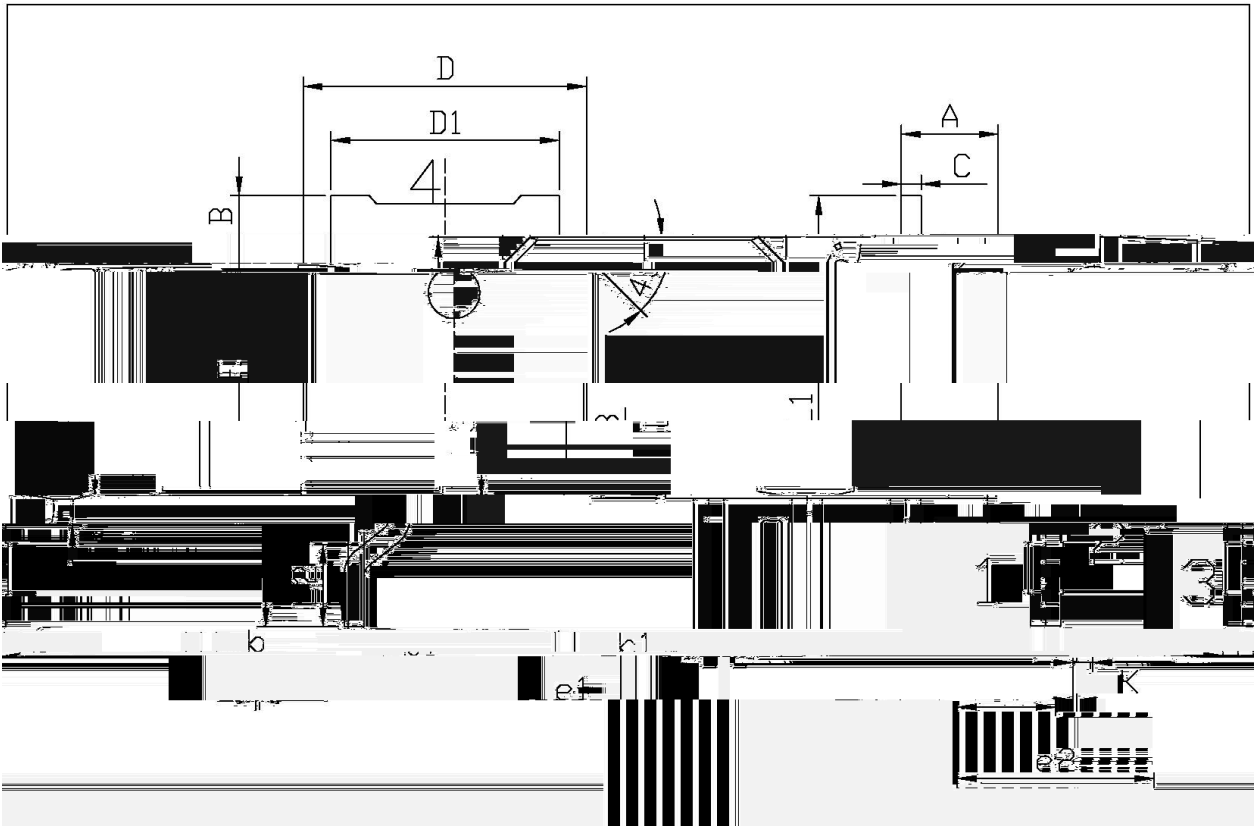
电性能参数 / Electrical Characteristics(Ta=25°C , Vi=10V,Io=350mA , unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Output voltage	V_O	$T_j=25$	4.9	5	5.1	V
		$V_i=7V-20V$ $I_o=5mA-350mA$	4.8	5	5.2	V
Load Regulation	ΔV_O	$T_j=25$ $I_o=5mA-500mA$			100	mV
		$T_j=25$ $I_o=5mA-200mA$			50	mV
Line regulation	ΔV_O	$T_j=25^{\circ}C$ $V_i=7V-25V$			100	mV
		$T_j=25^{\circ}C$ $V_i=8V-25V$			50	mV
Output Noise Voltage	eN	$T_j=25^{\circ}C$ B=10Hz-100KHz		40		μV
Supply Voltage Rejection	SVR	f=120Hz $V_i=8V-18V$	62			dB
Short Circuit Current	Isc	$V_i=35V$ $T_j=25^{\circ}C$		300		mA
Quiescent Current	I _d	$T_j=25^{\circ}C$			6	mA
Quiescent Current Change	ΔI_d	$V_i=8V-25V$			0.8	mA
		$I_o=5mA-350mA$			0.5	mA
Output Voltage Drift	$\Delta V_O/\Delta T$	$I_o=5mA$		-0.5		mV/°C
Dropout Voltage	V _d	$T_j=25^{\circ}C$		2		V
Short Circuit Peak Current	I _{scp}	$T_j=25^{\circ}C$		700		mA

电参数曲线图 / Electrical Characteristic Curve



外形尺寸图 / Package Dimensions



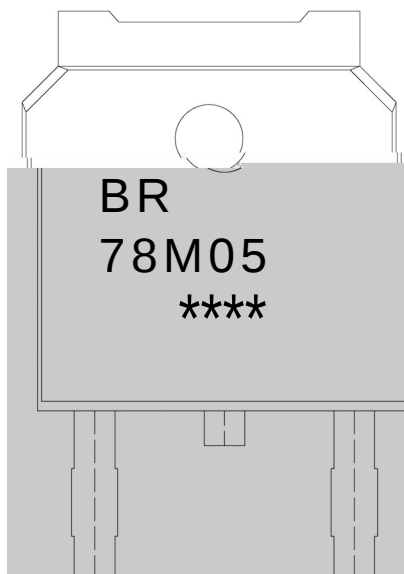
单位: mm

Dimensions In Millimeters			Dimensions In Millimeters		
Symbol	Min	Max	Symbol	Min	Max
A	5.95	6.25	E	2.20	2.40
B	1.27	1.43	L2	1.70	2.00
C	0.45	0.55	L3	0.60	0.90
D	6.45	6.75	K	0.00	0.10
D1	5.10	5.50			

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TO-25

印章说明 / Marking Instructions



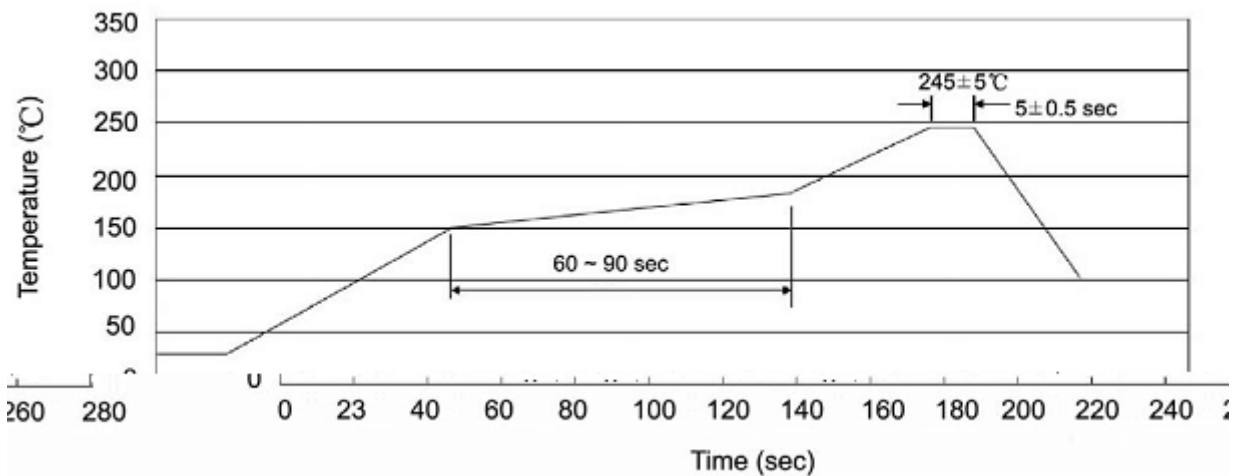
Note:

BR: Company Code.

78M05: Product Type.

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

回流焊温度曲线图(无铅) / 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. |

耐焊接热试验条件 / Resistance to Soldering Heat Test Conditions

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

包装规格 / Packaging SPEC.

/ REEL

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	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-252	2,500	2	5,000	6	30,000	13" ×16	360×360×50	380×335×366

/ TUBE

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	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-251/252	75	48	3,600	5	18,000	526×20.5×5.25	555×164×50	575×290×180

使用说明 / Notices