

78M08
Rev.G Dec.-2018

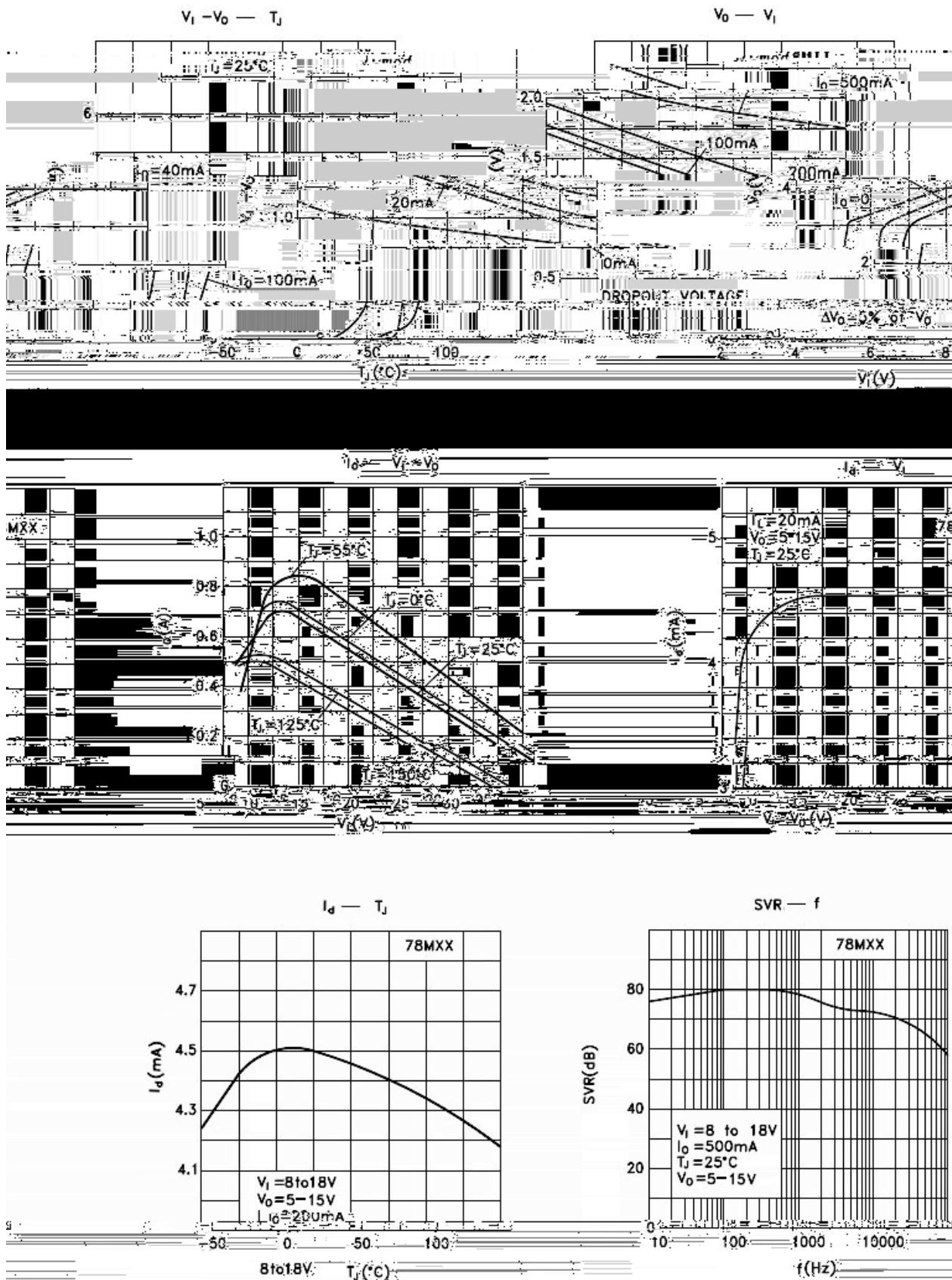
TO-252

Voltage Regulator in a TO-252 Plastic Package.

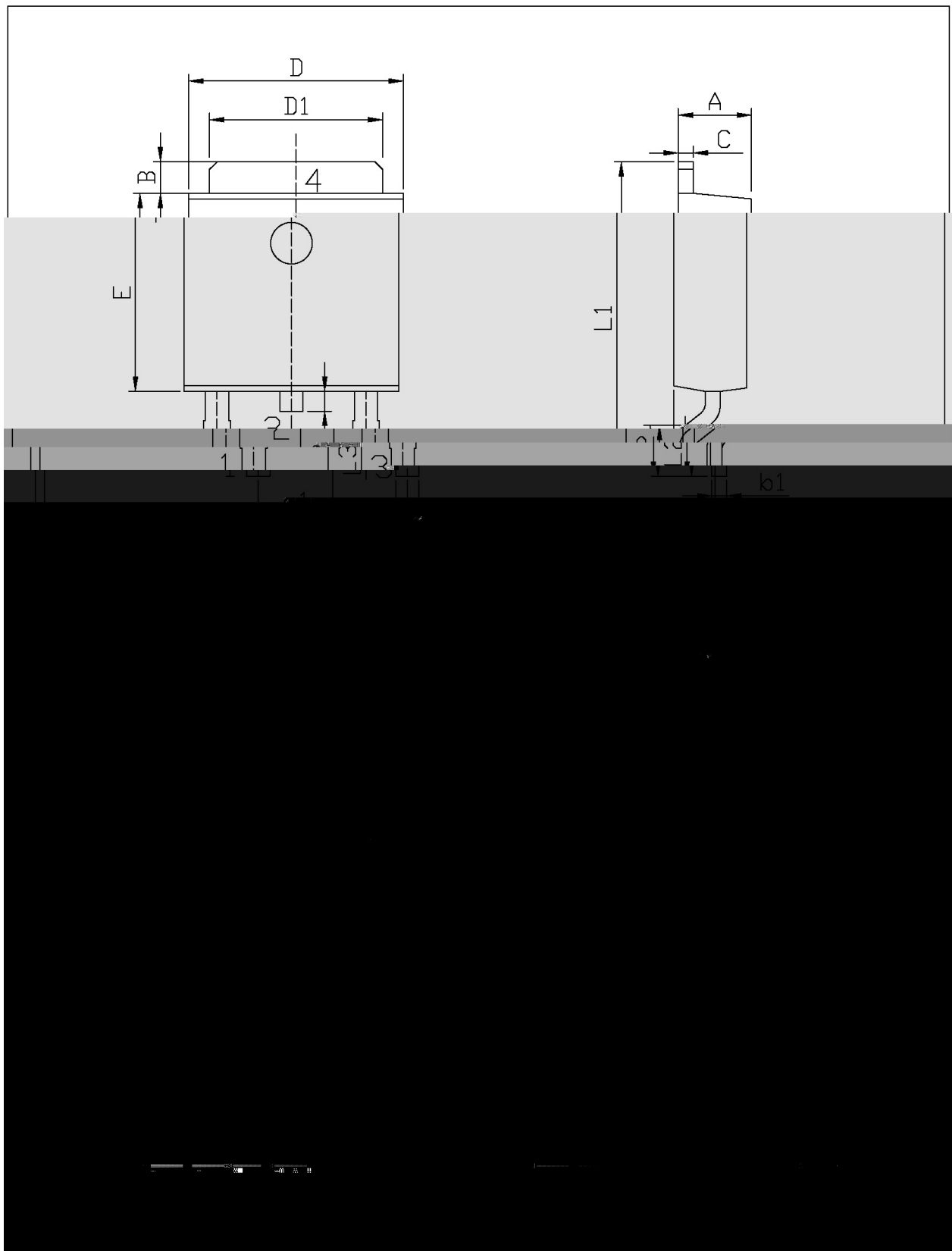
Parameter	Symbol	Rating	Unit
Input voltage	V_i	35	V
Thermal Resistance Junction-ambient	$R_{\theta JA}$	100	/W
Thermal Resistance Junction-case	$R_{\theta JC}$	8.0	/W
Operating Junction Temperature Range	T_{OPR}	0 125	
Storage temperature range	T_{stg}	-65 150	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Output voltage	V_o	$T_j=25$	7.8	8	8.2	V
		$V_i=10.5V-25V$ $I_o=5mA-350mA$	7.7	8	8.3	V
Load Regulation	V_o	$T_j=25$ $I_o=5mA-500mA$			100	mV
		$T_j=25$ $I_o=5mA-200mA$			50	mV
Line regulation	V_o	$T_j=25$ $V_i=10.5V-25V$			100	mV
		$T_j=25$ $V_i=11V-25V$			50	mV
Output Noise Voltage	eN	$T_j=25$ B=10Hz-100KHz		52		μV
Supply Voltage Rejection	SVR	f=120Hz $V_i=11.5V-21.5V$	56			dB
Short Circuit Current	Isc	$V_i=35V$ $T_j=25$		250		mA
Quiescent Current	I _d	$T_j=25$			6	mA
Quiescent Current Change	I _d	$V_i=8V-25V$			0.8	mA
		$I_o=5mA-350mA$			0.5	mA
Output Voltage Drift	V_o/ T	$I_o=5mA$		0.5		mV/

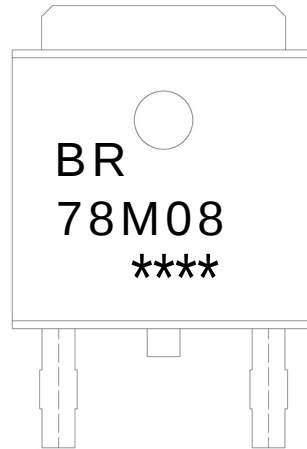
/ Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



BR

78M08

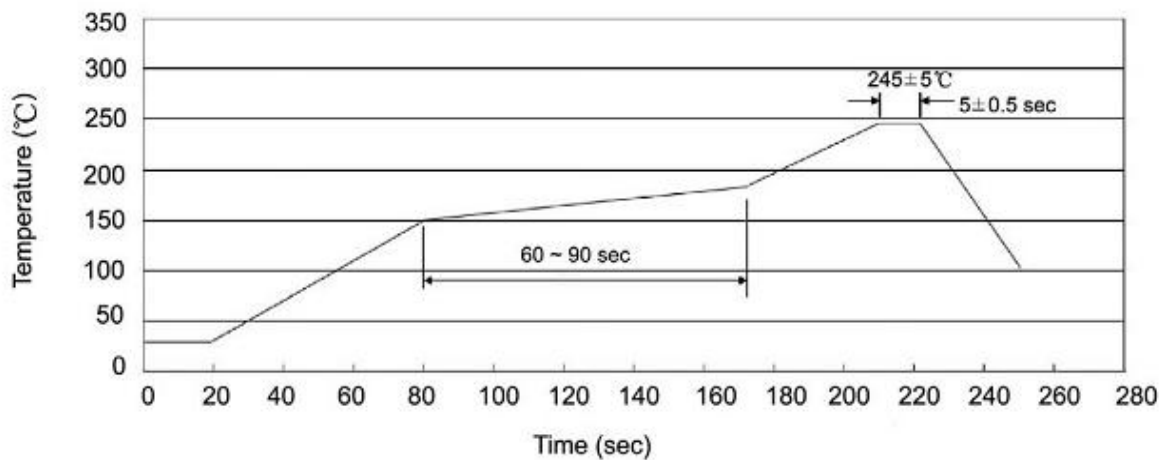
Note:

BR: Company Code.

78M08: 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 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: mm3)		
	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

/ Notices