

**78M08**  
Rev.G Dec.-2018

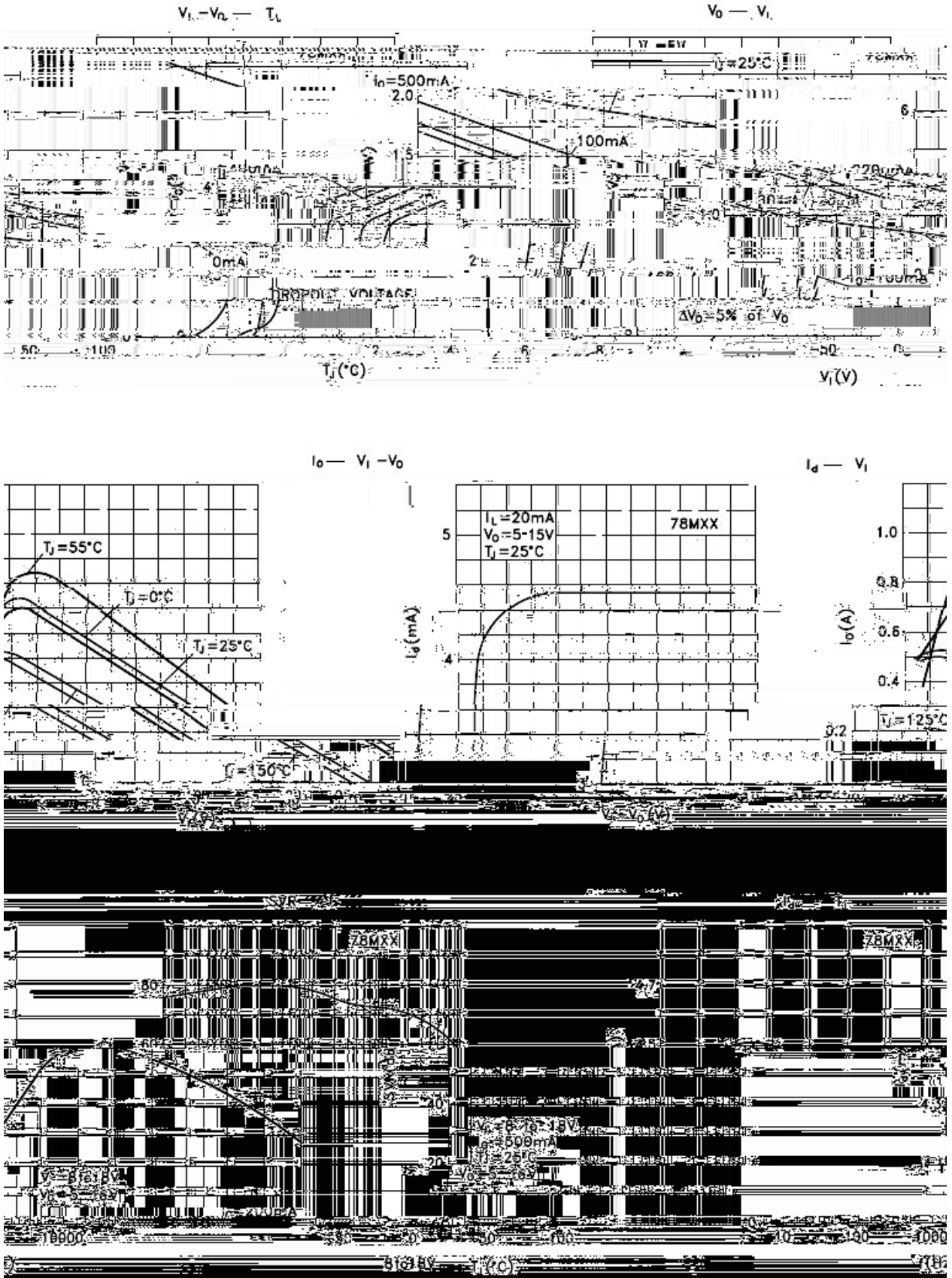
TO-252

Voltage Regulator in a TO-252 Plastic Package.

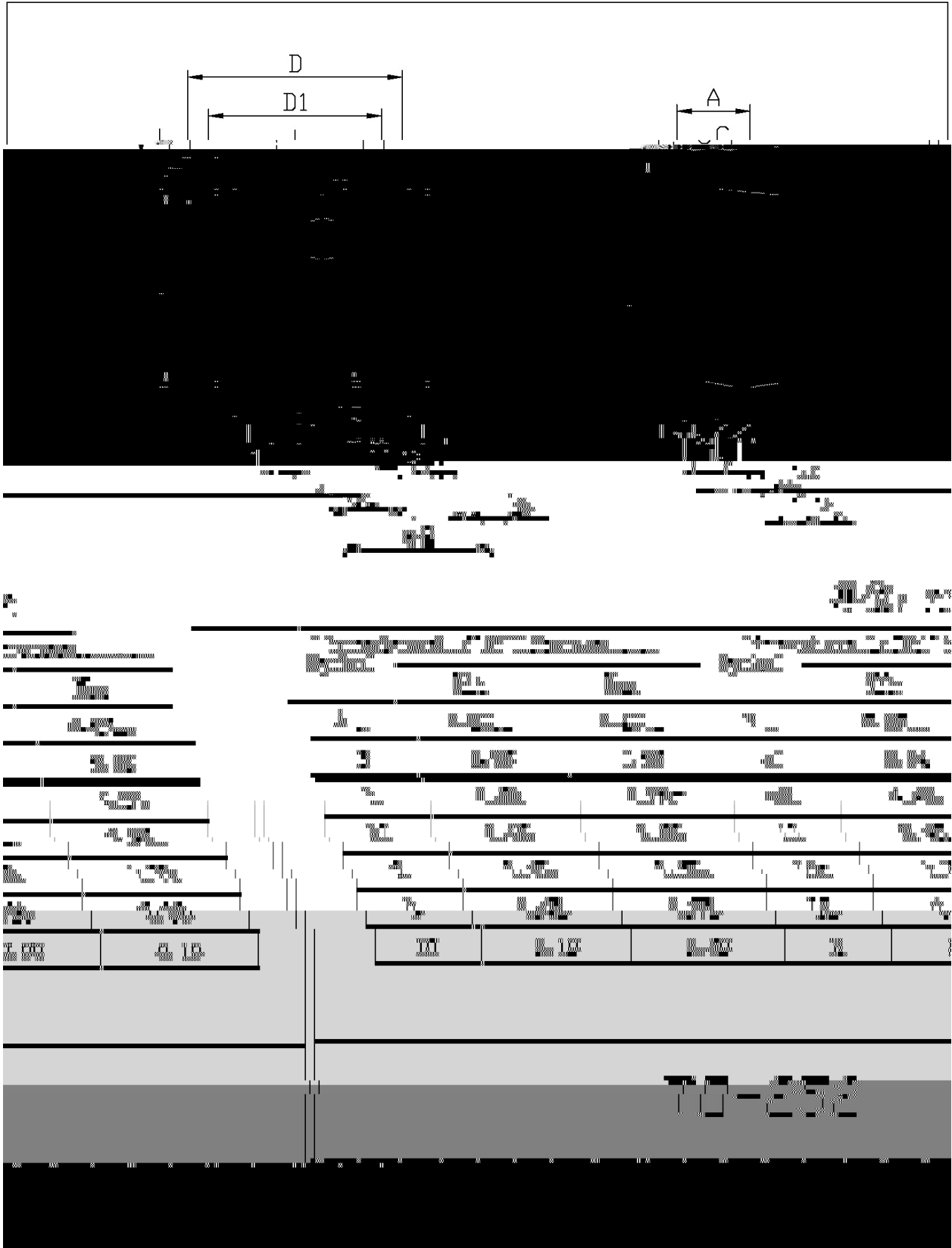
Parameter	Symbol	Rating	Unit
Input voltage	$V_i$	35	V
Thermal Resistance Junction-ambient	$R_{JA}$	100	/W
Thermal Resistance Junction-case	$R_{JC}$	8.0	/W
Operating Junction Temperature Range	$T_{OPR}$	0 125	
Storage temperature range	$T_{stg}$	-65 150	

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		V
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
Output Voltage Drift	$V_o/$	$V_i=8V-25V$			0.8	mA
		$I_o=5mA-350mA$			0.5	mA
		$I_o=5mA$		0.5		mV/

/ Electrical Characteristic Curve

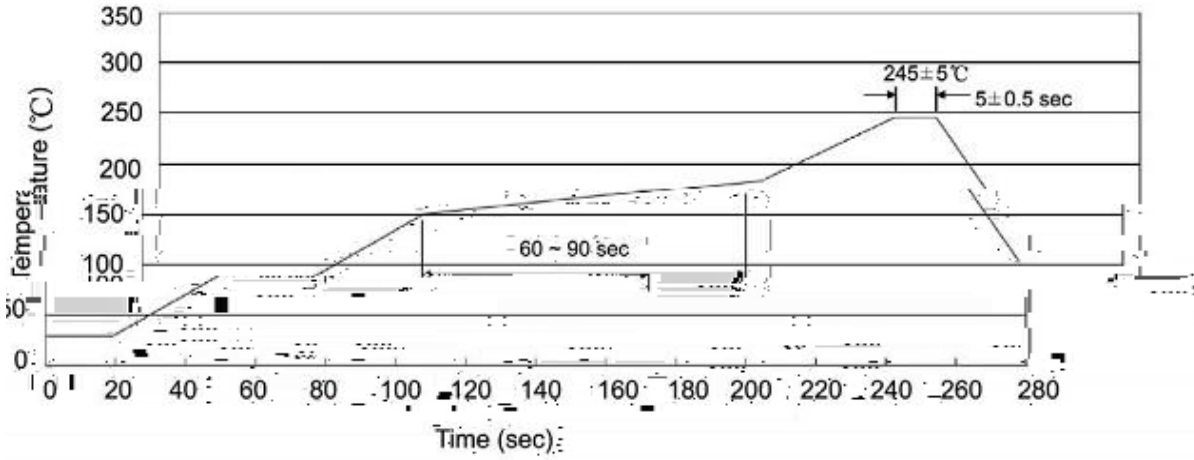


/ Package Dimensions





( ) / 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 <sup>3</sup> )		
	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 <sup>3</sup> )		
	Units/Tube	Tubes/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Tube	Inner Box	Outer Box