

78L08
Rev.F Sep.-2018



DATA SHEET

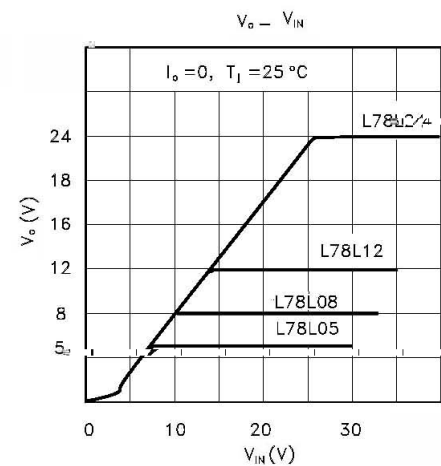
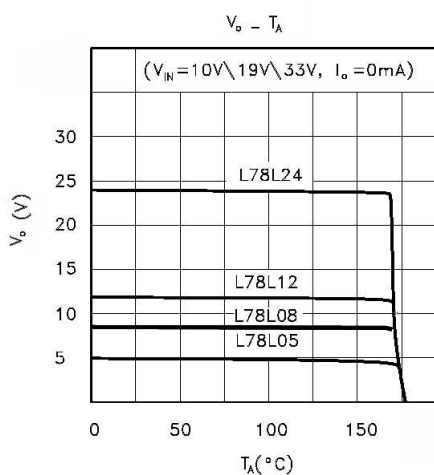
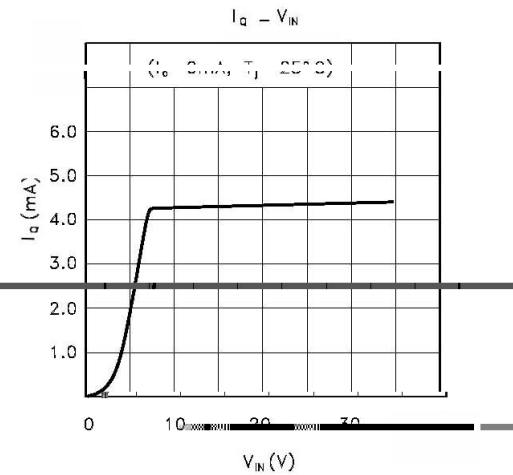
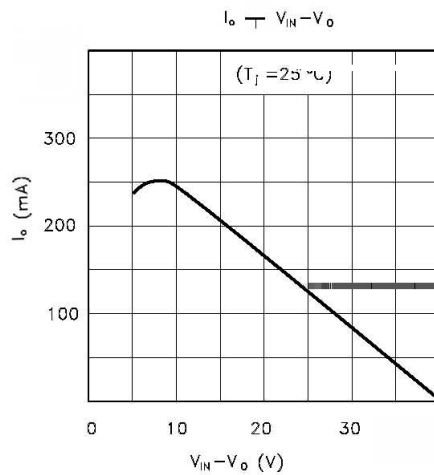
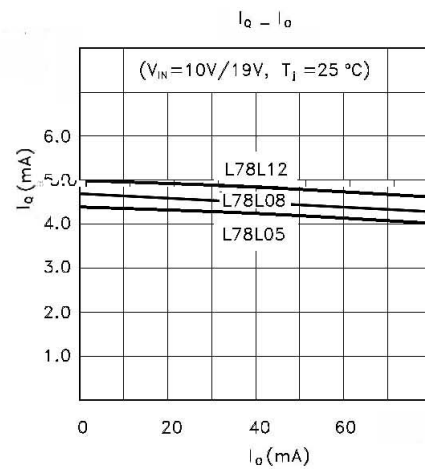
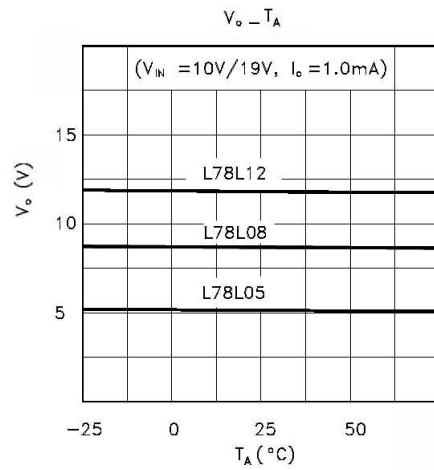
/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Input voltage	V_I	30	V
Output current	I_O	100	mA
Operating virtual Junction temperature	T_J	0 125	
Power Dissipation	P_D	500	mW
Storage temperature range	T_{stg}	-65 150	

/ Electrical Characteristics(Ta=25 $V_I=14V, I_O=40mA$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Output voltage	V_O	$I_O = 40mA$ $T_J=25$	7.7	8.0	8.3	V
		$I_O=1mA$ to 40mA $V_I=10.5V$ to 23V	7.6	8.0	8.4	V
		$I_O=1mA$ to 70mA $V_I=14V$	7.6	8.0	8.4	V
Input regulation	V_O	$V_I=10.5V$ to 23V $T_J=25$		42	175	mV
		$V_I=11V$ to 23V $T_J=25$		36	125	mV
Ripple rejection	RR	$V_I=13V$ to 23V $T_J=25$ $f=120Hz$	37	46		dB
Output regulation	V_O	$I_O=1mA$ to 100mA $T_J=25$		18	80	mV
		$I_O=1mA$ to 40mA $T_J=25$		10	40	mV
Output noise voltage	V_N	$f=10Hz$ to 100KHz $T_J=25$		54		μV
Dropout voltage	V_D	$T_J=25$		1.7		V
Bias current	I_Q	$T_J=25$		4	6	mA
		$T_J=125$			5.5	mA
Bias current change	I_Q	$V_I=11V$ to 23V			1.5	mA
		$I_O=1mA$ to 40mA			0.1	mA

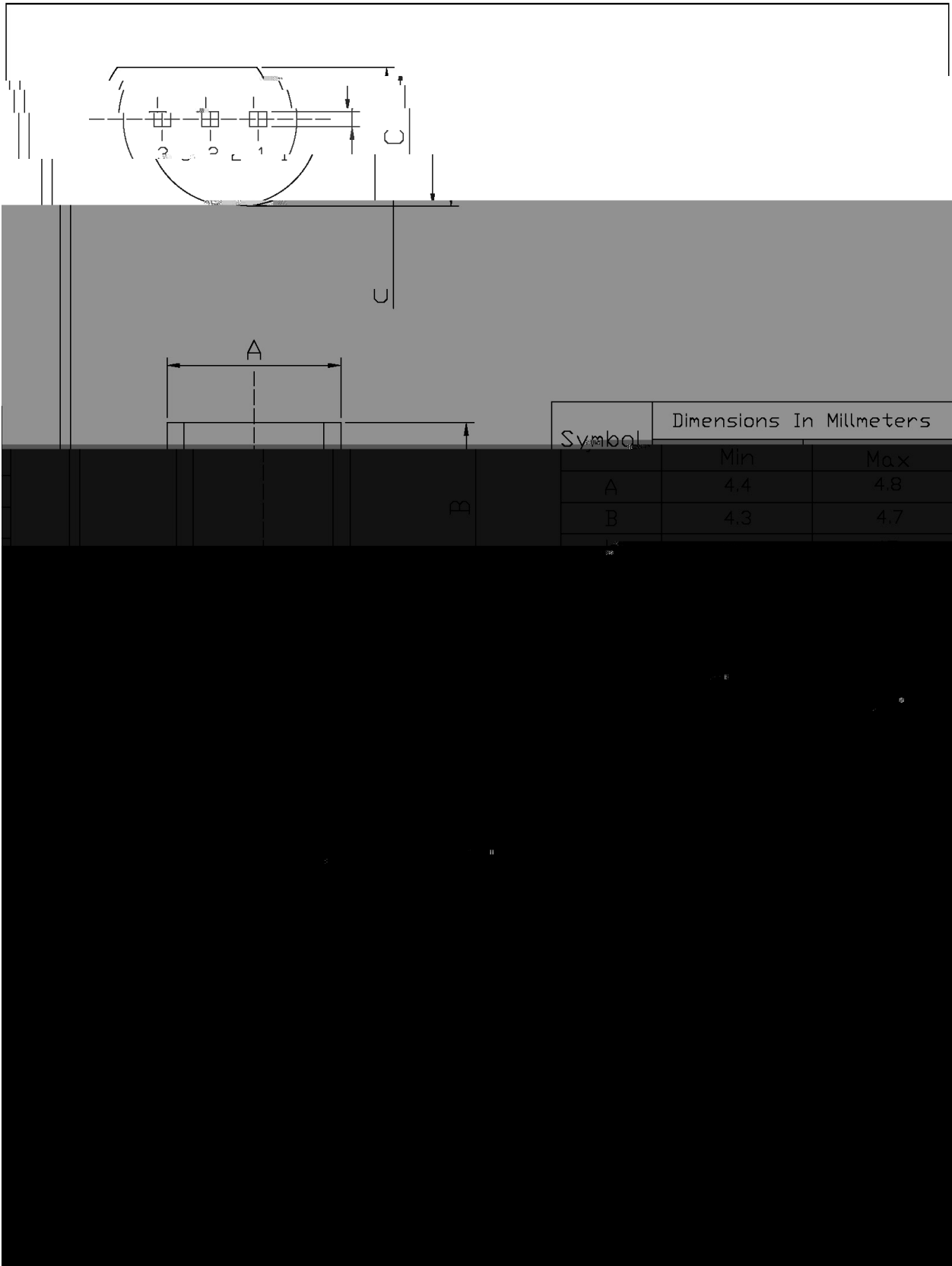
/ Electrical Characteristic Curve



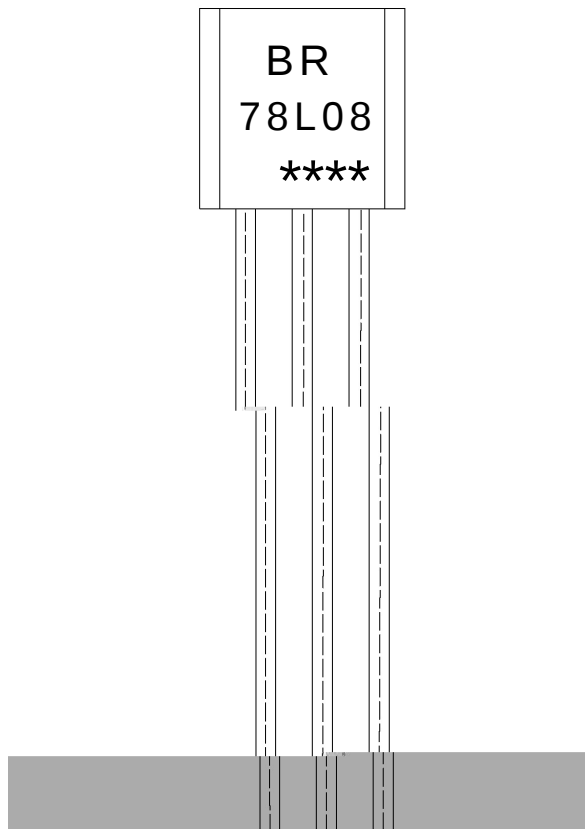
/ Package Dimensions

TO-92

Unit: mm



/ Marking Instructions



BR

78L08

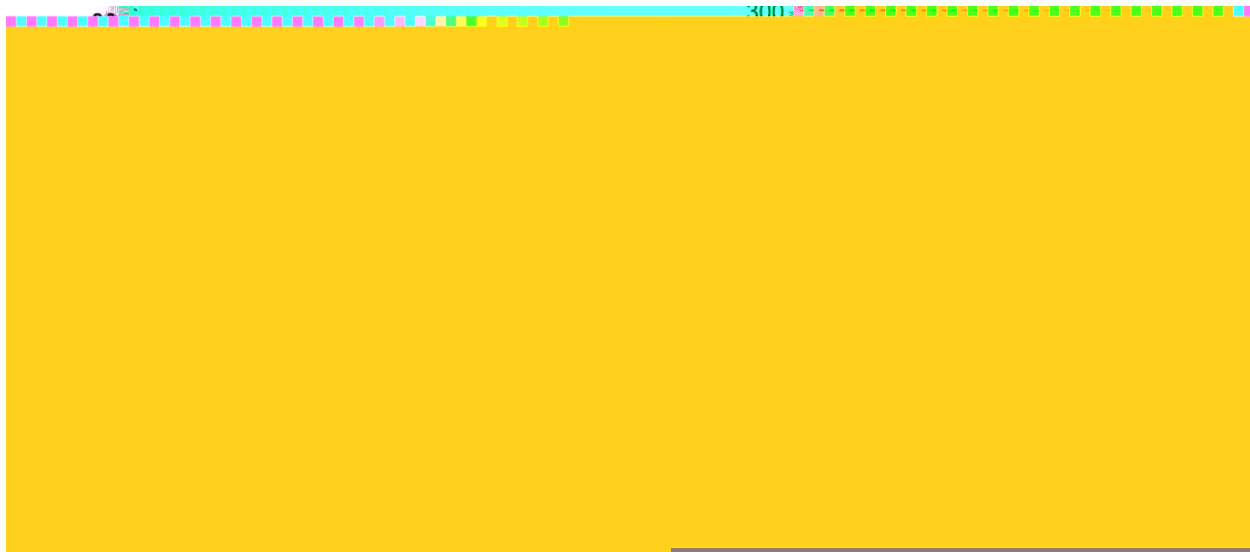
Note:

BR: Company Code.

78L08: Product Type.

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

() / Temperature Profile for Dip Soldering(Pb-Free)



Note:

- | | | | | | |
|---|-------|-----|-----------|--------|---|
| 1 | 25 | 150 | 60 | 90sec; | 1.Preheating:25~150 , Time:60~90sec. |
| 2 | 255±5 | | 5±0.5sec; | | 2.Peak Temp.:255±5 , Duration:5±0.5sec. |
| 3 | | 2 | 10 | /sec. | 3. Cooling Speed: 2~10 /sec. |

/ Resistance to Soldering Heat Test Conditions

270±5 10±1 sec. Temp:270±5 Time:10±1 sec

/ Packaging SPEC.

/ BULK

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm3)		
	Units/Bag 只/袋	Bags/Inner Box 袋/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Bag 袋	Inner Box 盒	Outer Box 箱
TO-92	1,000	10	10,000	5	50,000	135×190	237×172×102	560×245×195
	1,000	10	10,000	10	100,000	135×190	237×172×102	560×245×375

/ AMMO

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm3)	
	Units/tape 只/纸带	Tape/Inner Box 纸带/盒	Rows/Inner Box 纸带层/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Inner Box 盒	Outer Box 箱
TO-92	3,000	1	120	10	30,000	328×230×42	小箱 480×346×235, 大箱 547×407×268

/ Notices