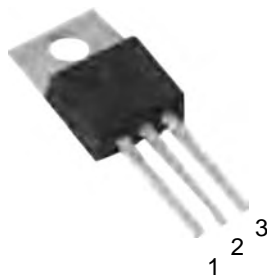


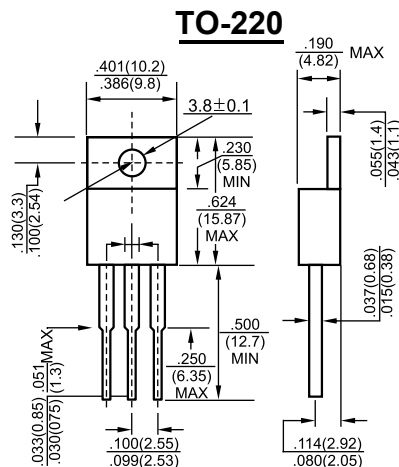


### Features

- ◇ Maximum Output current  
 $I_{OM}$ : 0.5 A
- ◇ Output voltage  
 $V_O$ : 8V
- ◇ Continuous total dissipation  
 $P_D$ : 1.5W ( $T_a = 25^\circ\text{C}$ )



1.IN  
2.GND  
3.OUT



Dimensions in inches and (millimeters)

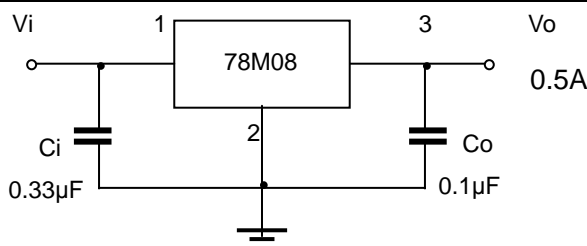
### ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)

Parameter	Symbol	Value	Unit
Input Voltage	$V_I$	35	V
Operating Junction Temperature Range	$T_{OPR}$	0-+125	$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-65-+150	$^\circ\text{C}$

### ELECTRICAL CHARACTERISTICS ( $V_i=14\text{V}, I_o=350\text{mA}, C_i=0.33\mu\text{F}, C_o=0.1\mu\text{F}$ , unless otherwise specified)

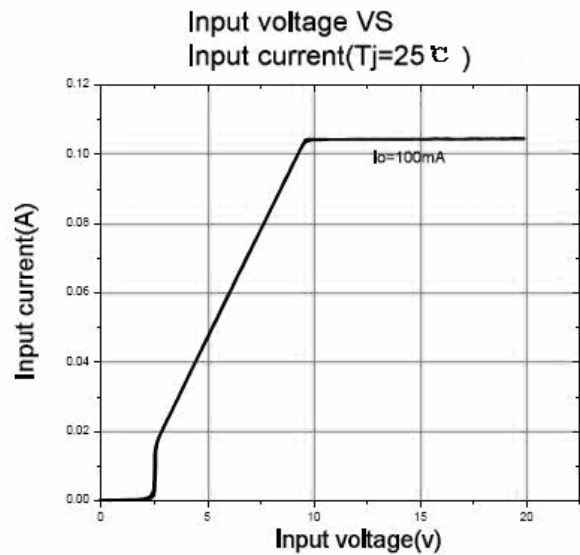
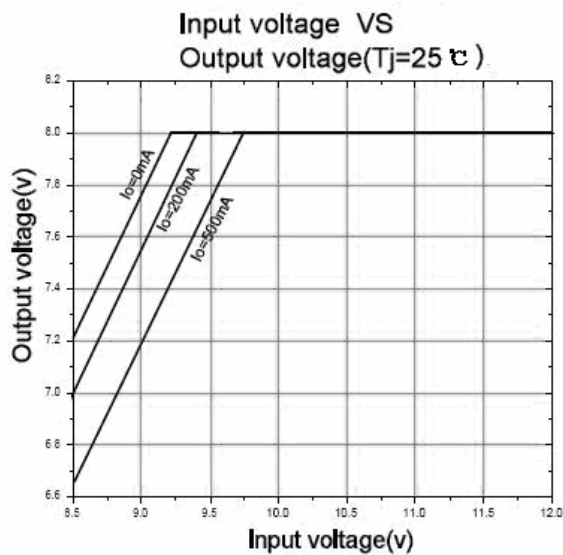
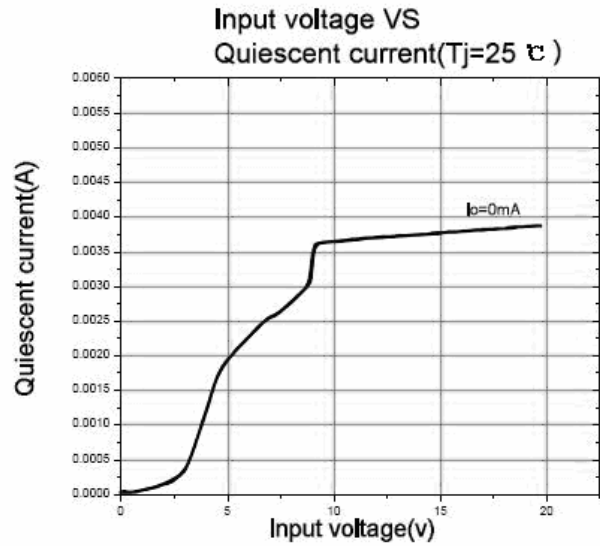
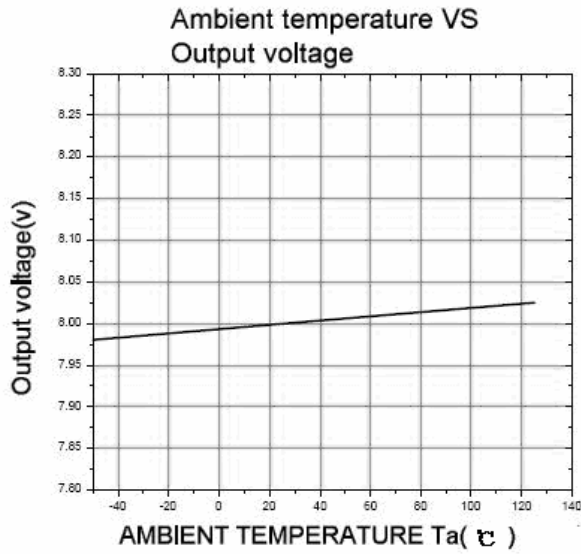
Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT	
Output voltage	$V_o$	$10.5\text{V} \leq V_i \leq 23\text{V}, I_o=5\text{mA}-350\text{mA}$	25 $^\circ\text{C}$	7.7	8	8.3	V
		$P_o \leq 15\text{W}$	0-125 $^\circ\text{C}$	7.6	8	8.4	V
Load Regulation	$\Delta V_o$	$I_o=5\text{mA}-500\text{mA}$	25 $^\circ\text{C}$		20	160	mV
		$I_o=5\text{mA}-200\text{mA}$	25 $^\circ\text{C}$		10	80	mV
Line regulation	$\Delta V_o$	$10.5\text{V} \leq V_i \leq 25\text{V}, I_o=200\text{mA}$	25 $^\circ\text{C}$		6	100	mV
		$11\text{V} \leq V_i \leq 25\text{V}, I_o=200\text{mA}$	25 $^\circ\text{C}$		2	50	mV
Quiescent Current	$I_q$		25 $^\circ\text{C}$		4.6	6	mA
Quiescent Current Change	$\Delta I_q$	$10.5\text{V} \leq V_i \leq 25\text{V}, I_o=200\text{mA}$	0-125 $^\circ\text{C}$			0.8	mA
		$5\text{mA} \leq I_o \leq 350\text{mA}$	0-125 $^\circ\text{C}$			0.5	mA
Output Noise Voltage	$V_N$	$10\text{Hz} \leq f \leq 100\text{KHz}$	25 $^\circ\text{C}$		52	$\mu\text{V}$	
Ripple Rejection	RR	$11.5\text{V} \leq V_i \leq 21.5\text{V}, f=120\text{Hz}, I_o=300\text{mA}$	0-125 $^\circ\text{C}$	56	80	dB	
Dropout Voltage	$V_d$	$I_o=350\text{mA}$	25 $^\circ\text{C}$		2	V	
Short Circuit Current	$I_{sc}$	$V_i=14\text{V}$	25 $^\circ\text{C}$		250	mA	
Peak Current	$I_{pk}$		25 $^\circ\text{C}$		0.7	A	

### TYPICAL APPLICATION





### Typical Characteristics



Package	Packing	Box Size L×W×H(mm)	Quantity(pcs/box)	Carton Size L×W×H(mm)	Quantity(pcs/carton)
TO-220	50pcs/Tube	560×150×50	1000	570×290×180	5000