

**/ Descriptions**

.> //x 9<sup>2</sup> ... ~ož

**/ Features**

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**/ Applications**

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**/ / Equivalent Circuit or Application Circuit****/ Pinning**

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**/ Marking**

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### Table 1 / Absolute Maximum Ratings(Ta=25 °C ; )

Parameter	Symbol	Rating	Unit
Input voltage	$V_I$	35	V
Thermal Resistance Junction-ambient	$R_{JA}$	60	/W
Thermal Resistance Junction-case	$R_{JC}$	5.0	/W
Operating Junction Temperature Range	$T_{OPR}$	0 ~ 125	
Storage temperature range	$T_{stg}$	-65 ~ 150	

### Table 2 / Electrical Characteristics(Ta=25 °C ; Vi=14V, Io=500mA unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Output voltage	$V_O$	$T_j=25$	7.7	8.0	8.3	V
		$V_i=10.5V-25V$ $I_o=5mA-1A$ $P_o \leq 15W$	7.6	8.0	8.4	V
Load Regulation	$\Delta V_O$	$T_j=25$ $I_o=5.0mA-1.5A$			160	mV
		$T_j=25$ $I_o=250mA-750mA$			80	mV
Line regulation	$\Delta V_O$	$T_j=25$ $V_i=10.5V-25V$			160	mV
		$T_j=25$ $V_i=11V-17V$			80	mV
Quiescent Current	$I_q$	$T_j=25$			8.0	mA
Quiescent Current Change	$\Delta I_q$	$V_i=10.5V-25V$			1.0	mA
		$I_o=5mA-1A$			0.5	mA
Output Voltage Drift	$\Delta V_O / T$	$I_o=5mA$		-0.8		mV/°C
Output Noise Voltage	eN	B=10Hz-100KHz $T_j=25$		52		V/Vo
Supply Voltage Rejection	SVR	$V_i=11.5V-21.5V$ $f=120Hz$	56			dB
Dropout Voltage	$V_d$	$I_o=1A$ $T_j=25$		2.0		V
Output Resistance	$R_o$	$f=1KHz$		16		mΩ
Short Circuit Current	$I_{sc}$	$V_i=35V$ $T_j=25$		0.45		A
Short Circuit Peak Current	$I_{scp}$	$T_j=25$		2.2		A



Ø □ = ) ϕ / Package Dimensions



### G PD t... • Ž Ć ( x / ) / Temperature Profile for Dip Soldering(Pb-Free)

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1• Ā ½ “ † 25 ½150 - k ž • 60 ½90sec;

2• Q › “ † 255 r5 - k ž • 4 Ò 5 r0.5sec;

3•D N ò i Ò 0 , † 2 ½10 - /sec.

Note:

1.Preheating:25~150 - , Time:60~90sec.

2.Peak Temp.:255 r5 - , Duration:5 r0.5sec.

3. Cooling Speed: 2~10 - /sec.

### ÂD /Cã p - » ] / Resistance to Soldering Heat Test Conditions

“ † y 270 r5 -

ž • y 10 r1 sec.

Temp:270±5

Time:10±1 sec

### G P á / Packaging SPEC.

• ^ x / BULK

Package Type ß m ù ´	Units g m ô h					Dimension g m d Ê (unit ! mm3)		
	Units/Bag /ß	Bags/Inner Box ß/Ć	Units/Inner Box /Ć	Inner Boxes/Outer Box Ć/±	Units/Outer Box /±	Bag ß	Inner BoxĆ	Outer Boxž
TO-220/F	200	10	2,000	5	10,000	135x190	237x172x102	560x245x195

ì ´ x / TUBE

Package Type ß m ù ´	Units g m ô h					Dimension g m d Ê (unit ! mm3)	
	Units/Tube /Š •	Tubes/Inner Box Š • /Ć	Units/Inner Box /Ć	Inner Boxes/Outer Box Ć/±	Units/Outer Box /±	Tube Š •	Inner BoxĆ
TO-220/F	50	20	1,000	5	5,000	532x31.4x5.5	555x164x50

### „ Ð y f / Notices