5 é / Descriptions

TO-220F .> / / x 9 ² … ˜ož Voltage Regulator in a TO-220F Plastic Package.

¤ ª / Features

€ l 9 ² … ˜ k ÿ ß v ä 1.5A, Ä — ½ ‘ y ? è ’ òož

3-Terminal regulators ,output current up to 1.5A, internal thermal overload protection and short-circuit limiting.

Ð ÷ / Applications

9 ² … ˜ož

Voltage Regulator.

Ã W] Ô · / € Ð Ô · / Equivalent Circuit or Application Circuit

• Û - æ / Pinning

1 2 3

PIN1 y IN PIN 2 y GND PIN 3 y OUT

, M V / Marking

• - ~ ª ¢ož See Marking Instructions

Ã a ? d / Absolute Maximum Ratings(Ta=25 ;)

@ ƒ Parameter	… Z Symbol	ƒ › Rating	% y Unit
Input voltage	V_I	35	V
Thernal Resistance Junction-ambient	R_{JA}	60	/W
Thernal Resistance Junction-case	R_{JC}	5.0	/W
Operating Junction Temperature Range	T_{OPR}	0 125	
Storage temperature range	T_{stg}	-65 150	

Ô4ì × ? d / Electrical Characteristics(Ta=25 ; g Vi=14V,Io=500mA gunless otherwise specified)

@ ƒ Parameter	… Z Symbol	y ¡ Ú ^ Test Conditions	Â 4 › Min	Á º › Typ	Â Ý › Max	% y Unit
Output voltage	V_O	T_j=25	7.7	8.0	8.3	V
		Vi=10.5V-25V Io=5mA-1A Po ”15W	7.6	8.0	8.4	V
Load Regulation	¸ Vo	T_j=25 Io=5.0mA-1.5A			160	mV
		T_j=25 Io=250mA-750mA			80	mV
Line regulation	¸ Vo	T_j=25 Vi=10.5V-25V			160	mV
		T_j=25 Vi=11V-17V			80	mV
Quiescent Current	Iq	T_j=25			8.0	mA
Quiescent Current Change	¸ Iq	Vi=10.5V-25V			1.0	mA
		Io=5mA-1A			0.5	mA
Output Voltage Drift	¸ Vo/¸ T	Io=5mA		-0.8		mV/
Output Noise Voltage	eN	B=10Hz-100KHz T_j=25		52		V/Vo
Supply Voltage Rejection	SVR	Vi=11.5V-21.5V f=120Hz	56			dB
Dropout Voltage	Vd	Io=1A T_j=25		2.0		V
Output Resistance	Ro	f=1KHz		16		m
Short Circuit Current	Isc	Vi=35V T_j=25		0.45		A
Short Circuit Peak Current	Iscp	T_j=25		2.2		A

Ø ¤ =) ¢ / Package Dimensions