

5 é / Descriptions

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

α a / Features

€ | 9 ² ... ~ k ý ß v ä 1.5A, Ä — ½ ' y ? è ' ò ož
3-Terminal regulators ,output current up to 1.5A, internal thermal overload protection and short-circuit limiting.

Đ ÷ / Applications

9 ² ... ~ož
Voltage Regulator.

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

• Ô - æ / Pinning

1 2 3

PIN1 y IN PIN 2 y GND PIN 3 y OUT

, M V / Marking

• - ~ a ¢ ož See Marking Instructions

Table 1 / Absolute Maximum Ratings(Ta=25℃ ;)

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℃ ; $V_I=14V, I_O=500mA$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Output voltage	V_O	$T_J=25^\circ C$	7.7	8.0	8.3	V
		$V_I=10.5V-25V$ $I_O=5mA-1A$ $P_{D(15W)}$	7.6	8.0	8.4	V
Load Regulation	ΔV_O	$T_J=25^\circ C$ $I_O=5.0mA-1.5A$			160	mV
		$T_J=25^\circ C$ $I_O=250mA-750mA$			80	mV
Line regulation	ΔV_O	$T_J=25^\circ C$ $V_I=10.5V-25V$			160	mV
		$T_J=25^\circ C$ $V_I=11V-17V$			80	mV
Quiescent Current	I_Q	$T_J=25^\circ C$			8.0	mA
Quiescent Current Change	ΔI_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	e_N	$B=10Hz-100KHz$ $T_J=25^\circ C$		52		V/Vo
Supply Voltage Rejection	SVR	$V_I=11.5V-21.5V$ $f=120Hz$	56			dB
Dropout Voltage	V_D	$I_O=1A$ $T_J=25^\circ C$		2.0		V
Output Resistance	R_O	$f=1KHz$		16		mΩ
Short Circuit Current	I_{SC}	$V_I=35V$ $T_J=25^\circ C$		0.45		A
Short Circuit Peak Current	I_{SCP}	$T_J=25^\circ C$		2.2		A

Ø □ =) ¢ / Package Dimensions



