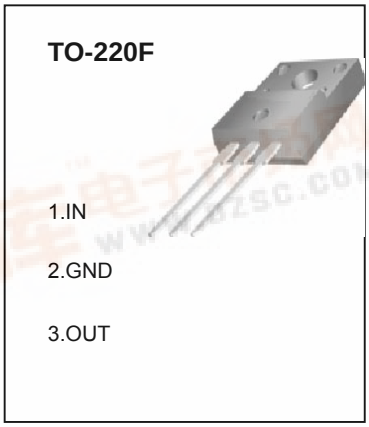
JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

TO-220F Plastic-Encapsulate voltage regulator

CJ7808F Three-terminal positive voltage regulator



FEATURES

Maximum Output current

$I_{OM:}$ 1.5 A

Output voltage

$V_{o:}$ 8 V

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 to 150	℃
Storage Temperature Range	T_{STG}	-65 to 150	℃

ELECTRICAL CHARACTERISTICS (Vi=14V,Io=500mA,0<Tj<125℃,Ci=0.33μF,Co=0.1μF,unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Output voltage	Vo	Tj=25℃	7.7	8	8.3	V
		10.5V≤V_i≤23V, Io=5mA-1A,P≤15W	7.6	8	8.4	V
Load Regulation	ΔVo	Tj=25℃, Io=5mA-1.5A		12	160	mV
		Tj=25℃, Io=250mA-750mA		4	80	mV
Line regulation	ΔVo	10.5V≤V_i≤25V, Tj=25℃		6	160	mV
		11V≤V_i≤17V, Tj=25℃		2	80	mV
Quiescent Current	Iq	Tj=25℃		4.3	8	mA
Quiescent Current Change	ΔIq	10.5V≤V_i≤25V			1	mA
	ΔIq	5mA≤I_O≤1A			0.5	mA
Output Noise Voltage	V_N	10Hz≤f≤100KHz		52		uV
Ripple Rejection	RR	11.5V≤V_i≤21.5V,f=120Hz,Tj=0-125℃	55	72		dB
Dropout Voltage	Vd	Tj=25℃, Io=1A		2		V
Short Circuit Current	Isc	Ta=25℃		450		mA
Peak Current	Ipk	Tj=25℃		2.2		A

TYPICAL APPLICATION