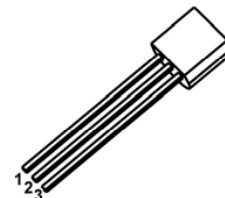


TO-92 Encapsulate Three-terminal Voltage Regulators
FEATURES
Maximum Output current
 $I_{OM}: 0.1\text{ A}$
Output voltage
 $V_O: 6\text{ V}$
Continuous total dissipation
 $P_D: 0.625\text{ W}$
TO-92

1.OUT

2.GND

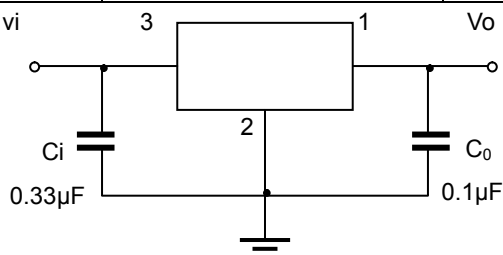
3.IN


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

Parameter	Symbol	Value	Units
Input Voltage	V_I	30	V
Operating Junction Temperature Range	T_{OPR}	0~+150	°C
Storage Temperature Range	T_{STG}	-55~+150	°C

ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE ($V_I=11\text{ V}$, $I_O=40\text{ mA}$, $C_i=0.33\mu\text{ F}$, $C_o=0.1\mu\text{ F}$, unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Output voltage	V_O	25°C	5.75	6.0	6.25	V
		8V≤ V_I ≤20V, $I_O=1\text{ mA}-40\text{ mA}$	5.7	6.0	6.3	V
		$I_O=1\text{ mA}-70\text{ mA}$	5.7	6.0	6.3	V
Load Regulation	ΔV_O	$I_O=1\text{ mA}-100\text{ mA}$		16	80	mV
		$I_O=1\text{ mA}-40\text{ mA}$		9	40	mV
Line regulation	ΔV_O	8V≤ V_I ≤20V		35	175	mV
		9V≤ V_I ≤20V		29	125	mV
Quiescent Current	I_q	25°C		3.9	6.0	mA
Quiescent Current Change	ΔI_q	9V≤ V_I ≤20V			1.5	mA
	ΔI_q	1mA≤ I_O ≤40mA			0.1	mA
Output Noise Voltage	V_N	10Hz≤f≤100KHz		46		μV
Ripple Rejection	RR	9V≤ V_I ≤19V, f=120Hz	40	48		dB
Dropout Voltage	V_d	25°C		1.7		V

TYPICAL APPLICATION


Note : Bypass capacitors are recommended for optimum stability and transient response and should be located as close as possible to the regulators.