

Features

- * Maximum Output Current I_O : 0.1 A
- * Output Voltage V_O : 5 V
- * Continuous Total Dissipation
- * P_D : 0.25 W ($T_a = 25^\circ\text{C}$)

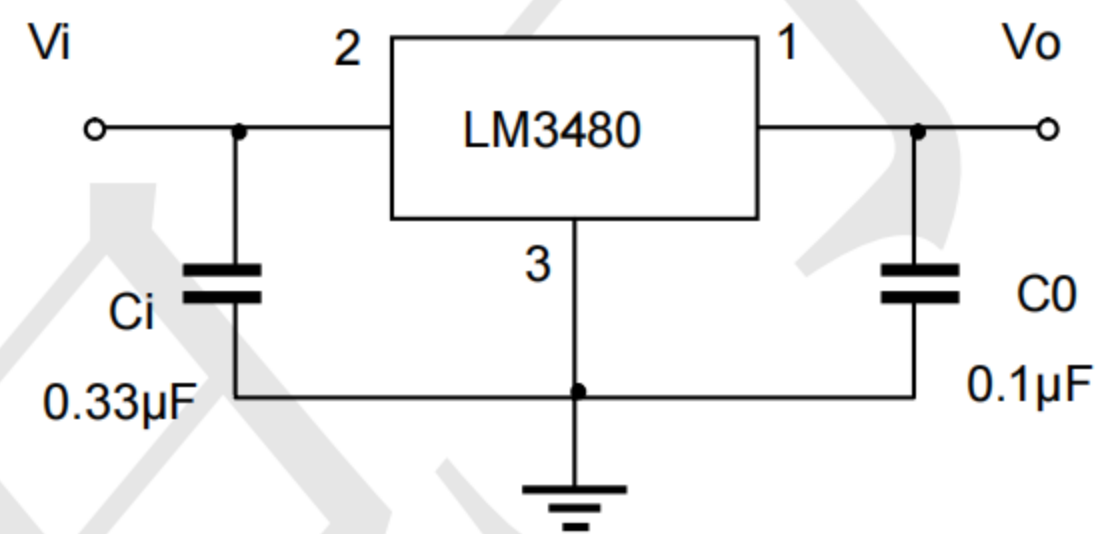
Mechanical Characteristics

- * Package: SOD-23
- * Lead Finish: Matte Tin
- * Case Material: "Green" Molding Compound.
- * Shipping Qty :3000 /7Inch Tape & Reel

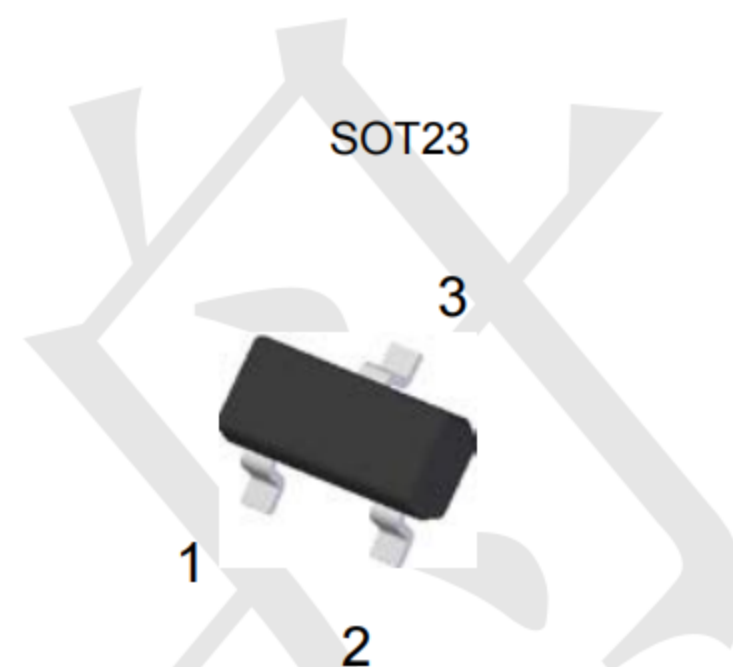
Applications

- * PostRegulatorfor SwitchingDC-DCConverter
- * BiasSupplyfor Digitaland AnalogCircuits
- * HomeAppliances
- * actoryand BuildingAutomation

Typical Application



Dimensions and Pin Configuration



1. OUT
2. IN
3. GND

Marking :L0A

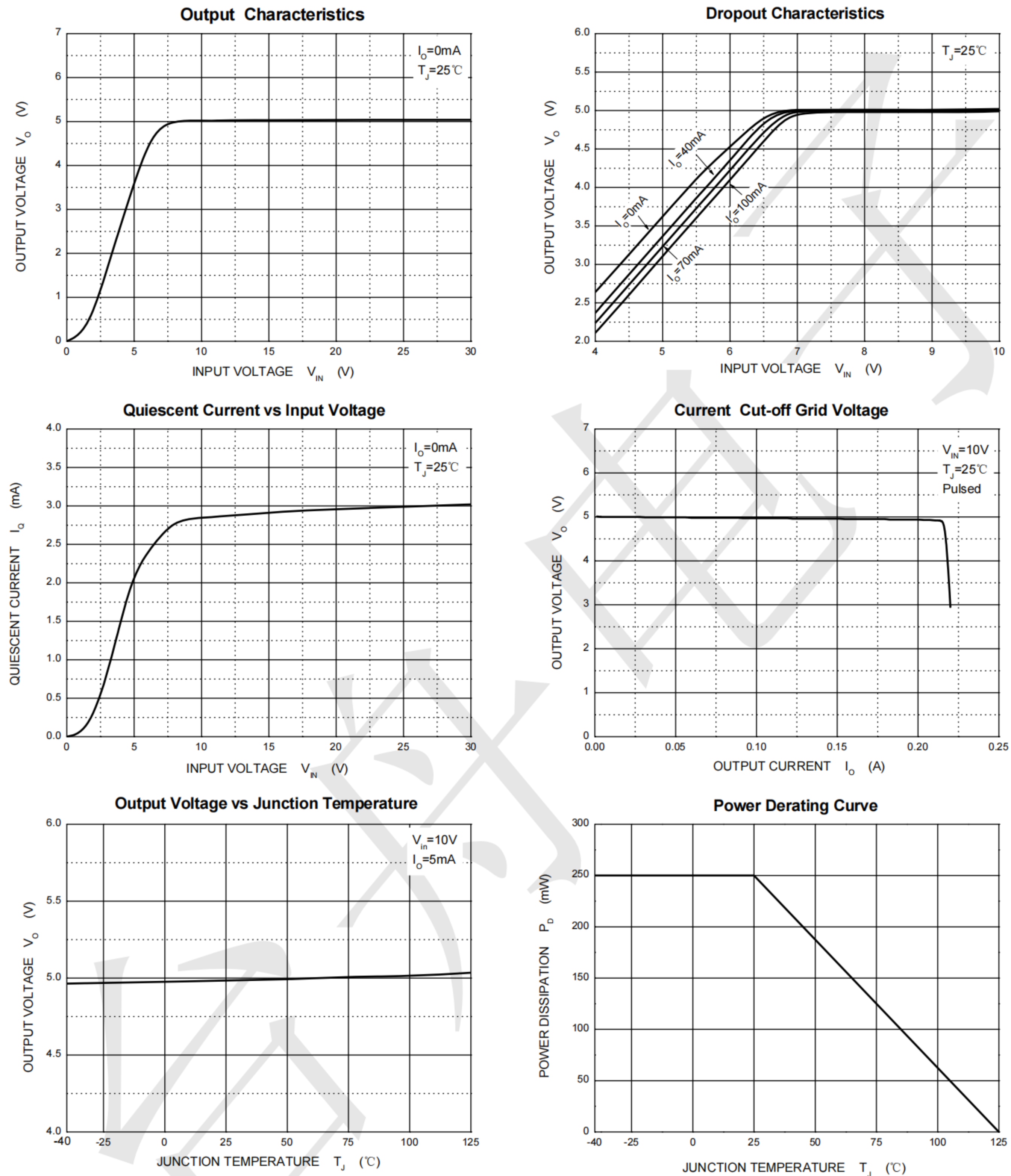
Absolute Maximum Ratings (Tamb=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Input Voltage	V_i	30	V
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	160	°C/W
Operating Junction Temperature Range	T_{OPR}	-40~+125	°C
Storage Temperature Range	T_{STG}	-65~+150	°C

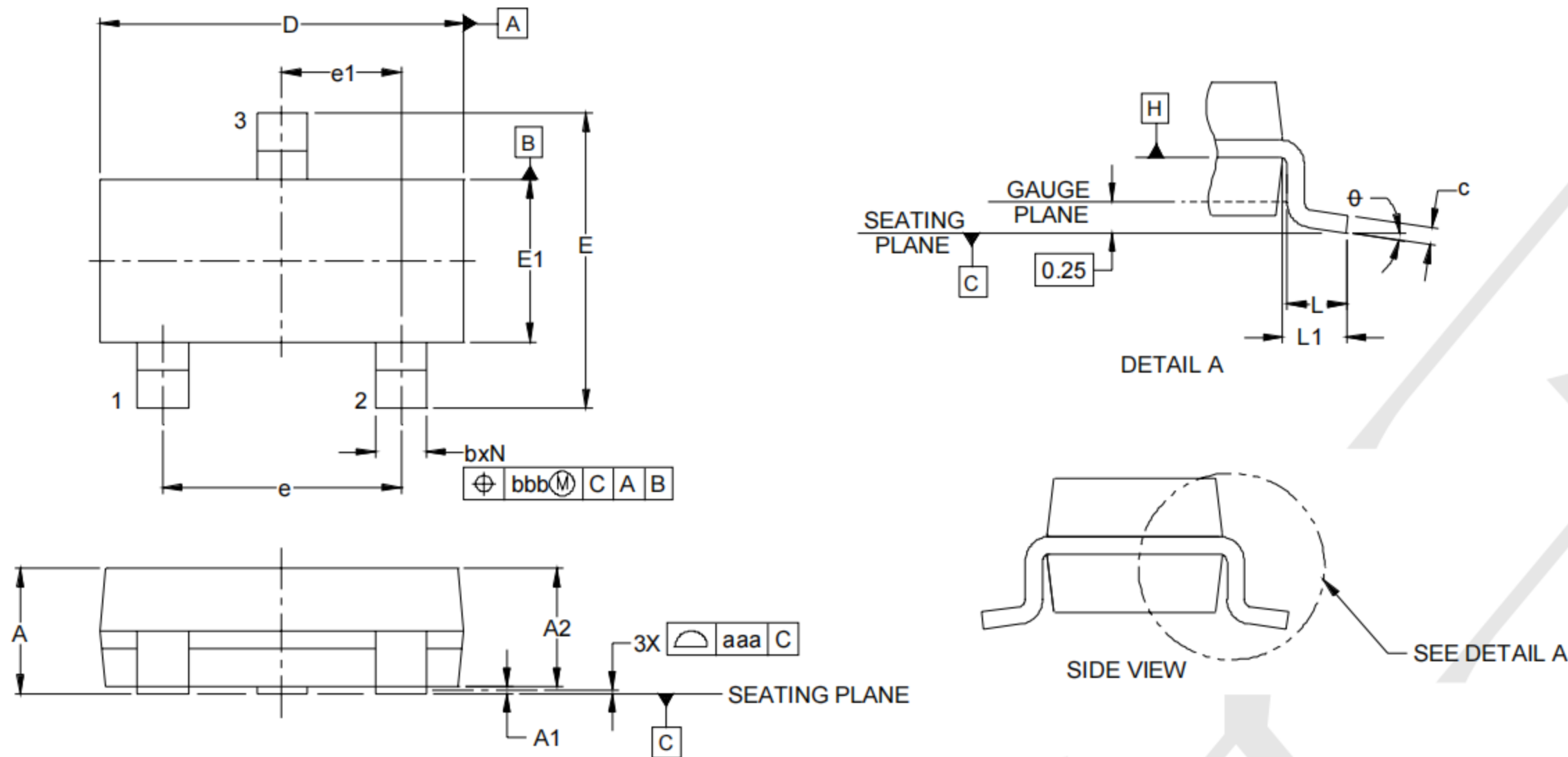
Electrical Characteristics (TA=25°C unless otherwise specified)

Parameter	Symbol	Test conditions			Min	Typ	Max	Unit	
				25°C	4%	4.80	5.0	5.20	V
					3%	4.85	5.0	5.15	V
					2%	4.90	5.0	5.10	V
Output voltage	Vo	7V≤Vi≤20V, Io=1mA~40mA	0-125°C	4.75	5.0	5.25	V		
		Io=1mA~70mA		4.75	5.0	5.25	V		
Load Regulation	ΔVo	Io=1mA~100mA	25°C		15	60	mV		
		Io=1mA~40mA	25°C		8	30	mV		
Line regulation	ΔVo	7V≤Vi≤20V			32	150	mV		
		8V≤Vi≤20V	25°C		26	100	mV		
Quiescent Current	Iq		25°C		3.8	6	mA		
Quiescent Current Change	ΔIq	8V≤Vi≤20V	0-125°C			1.5	mA		
	ΔIq	1mA≤Vi≤40mA	0-125°C			0.1	mA		
Output Noise Voltage	VN	10Hz≤f≤100KHz	25°C		42		μV/Vo		
Ripple Rejection	RR	8V≤Vi≤20V,f=120Hz	0-125°C	41	49		dB		
Dropout Voltage	Vd		25°C		1.7		V		

Characteristic Curves



Outline Drawing - SOT23



Land Pattern - SOT23

