

Features

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

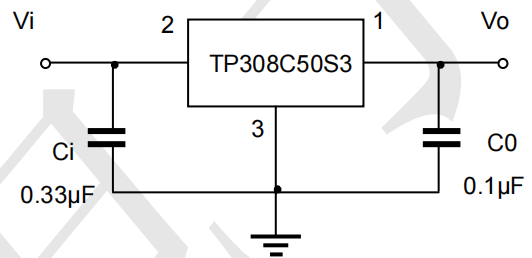
Mechanical Characteristics

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

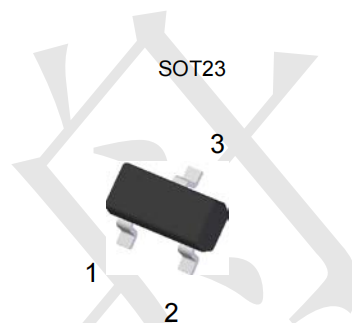
Applications

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

Typical Application



Dimensions and Pin Configuration



1. OUT
2. IN
3. GND

Marking :P8xx

P8= is part number, fixed
xx= is internal code

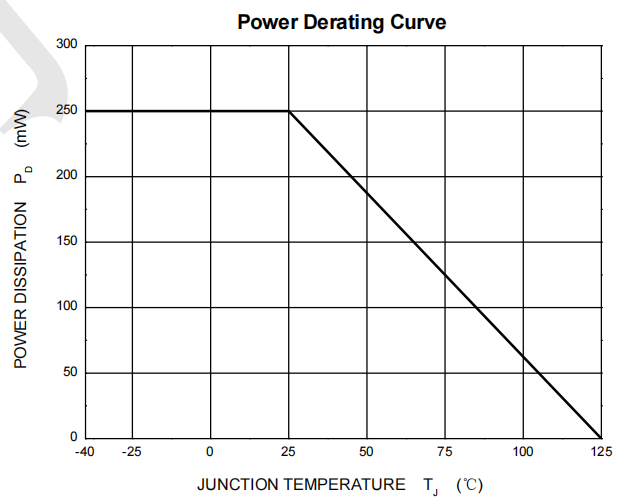
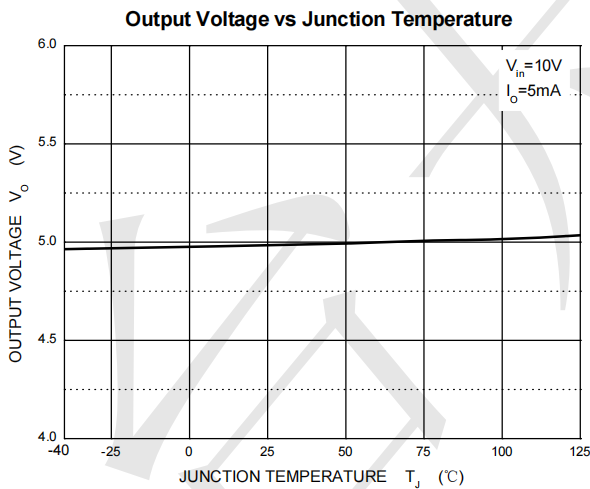
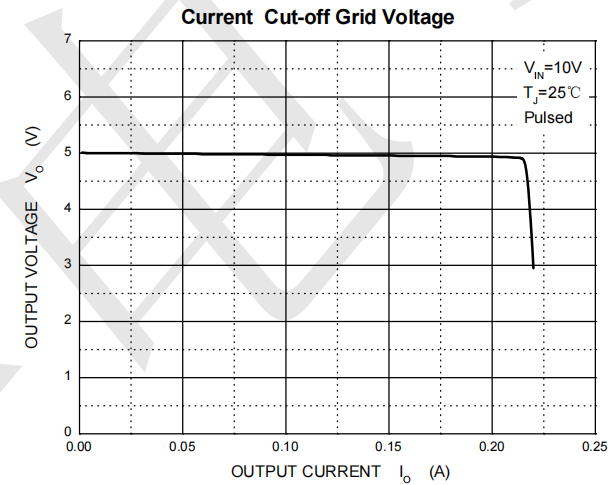
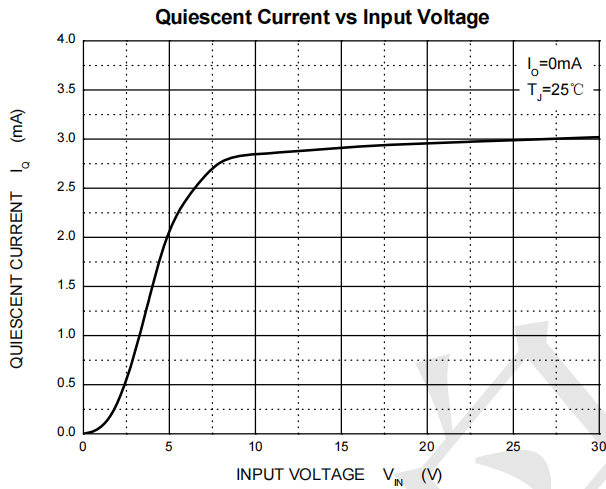
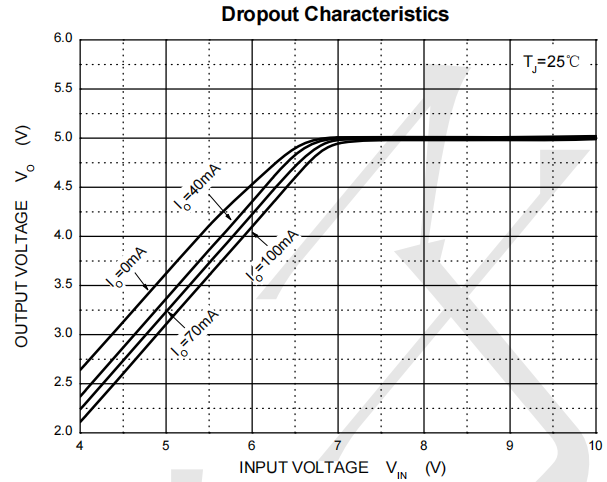
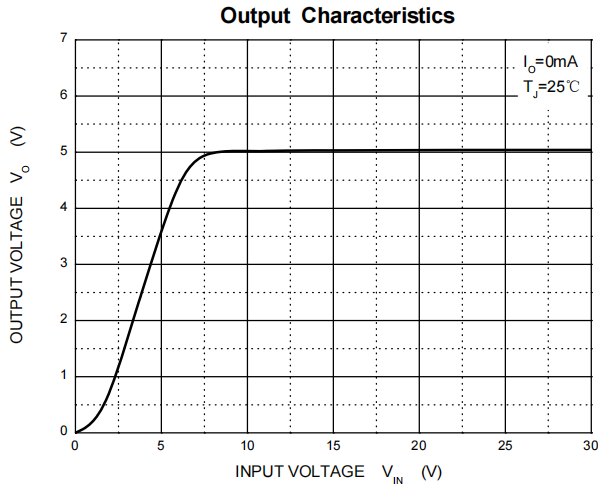
Absolute Maximum Ratings (Tamb=25°C unless otherwise specified)

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

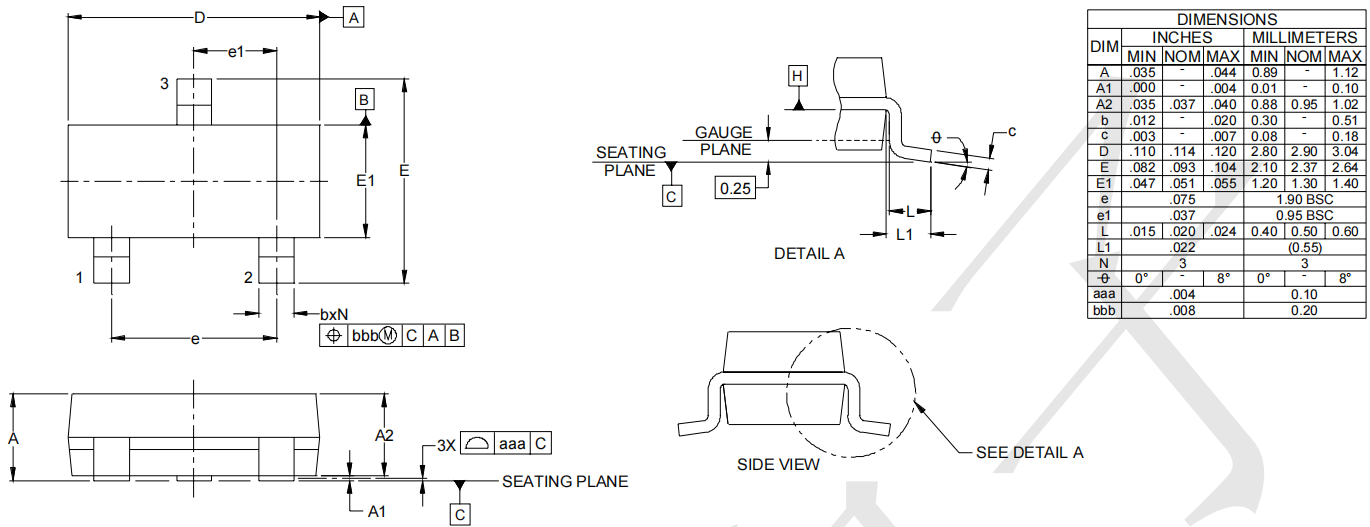
Electrical Characteristics (TA=25°C unless otherwise specified)

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	V_o	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	ΔV_o	Io=1mA~100mA	25°C		15	60	mV	
		Io=1mA~40mA	25°C		8	30	mV	
Line regulation	ΔV_o	7V≤Vi≤20V	25°C		32	150	mV	
		8V≤Vi≤20V			26	100	mV	
Quiescent Current	I_q		25°C		3.8	6	mA	
Quiescent Current Change	ΔI_q	8V≤Vi≤20V	0-125°C			1.5	mA	
	ΔI_q	1mA≤Vi≤40mA	0-125°C			0.1	mA	
Output Noise Voltage	V_N	10Hz≤f≤100KHz	25°C		42		μV/Vo	
Ripple Rejection	RR	8V≤Vi≤20V, f=120Hz	0-125°C	41	49		dB	
Dropout Voltage	V_d		25°C		1.7		V	

Characteristic Curves



Outline Drawing - SOT23



Land Pattern - SOT23

