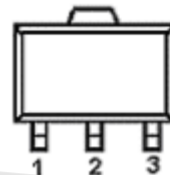


■ Features

- Maximum output current
 I_{OM} : 0.1A
- Output voltage
 V_O : 5V
- Continuous total dissipation
 P_D : 0.6 W ($T_a = 25^\circ\text{C}$)



1.OUT
2.GND
3.IN

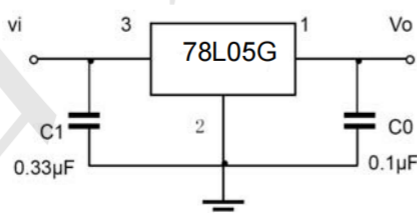
■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

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

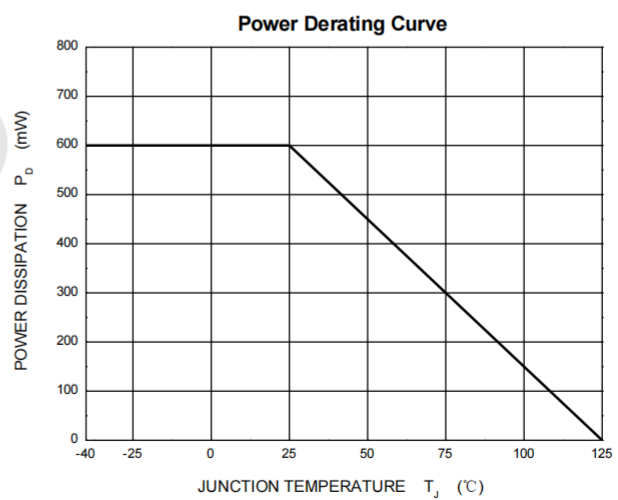
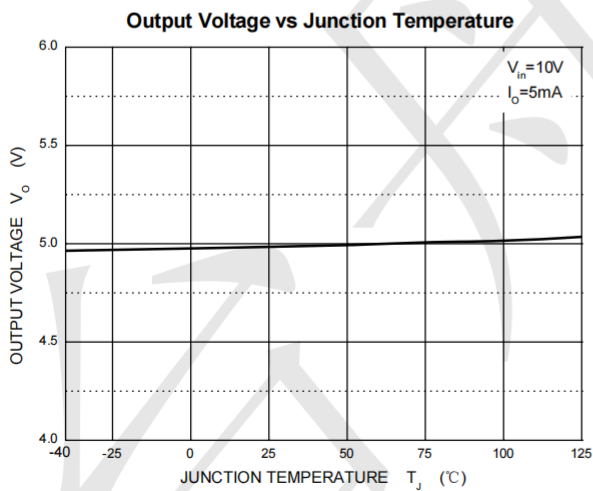
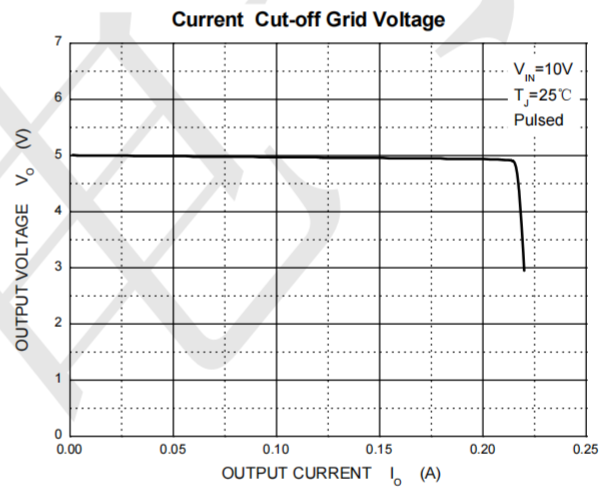
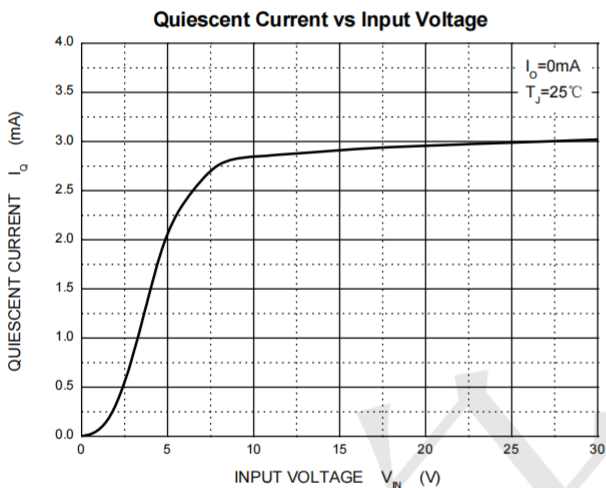
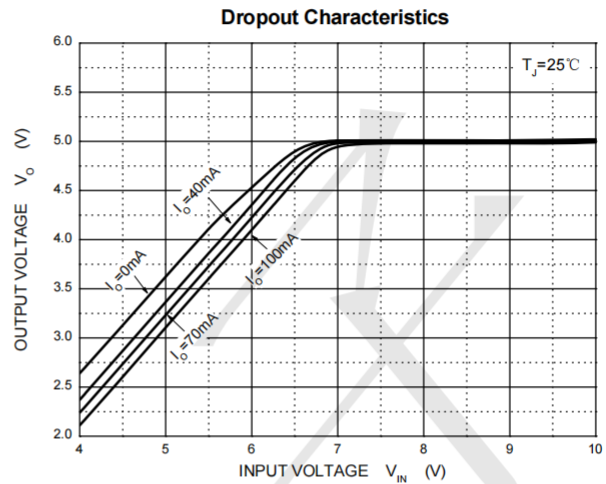
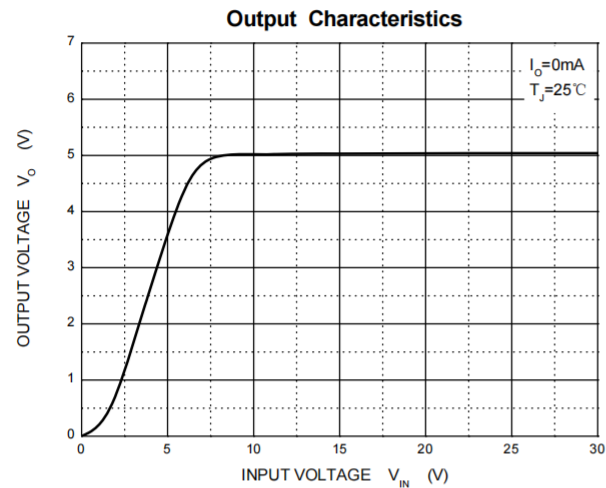
■ Electrical Characteristics ($V_i=10\text{V}$, $I_o=40\text{mA}$, $0^\circ\text{C}<T_j<125^\circ\text{C}$, $C_1=0.33\mu\text{F}$, $C_o=0.1\mu\text{F}$, unless otherwise specified)

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

■ Typical application.



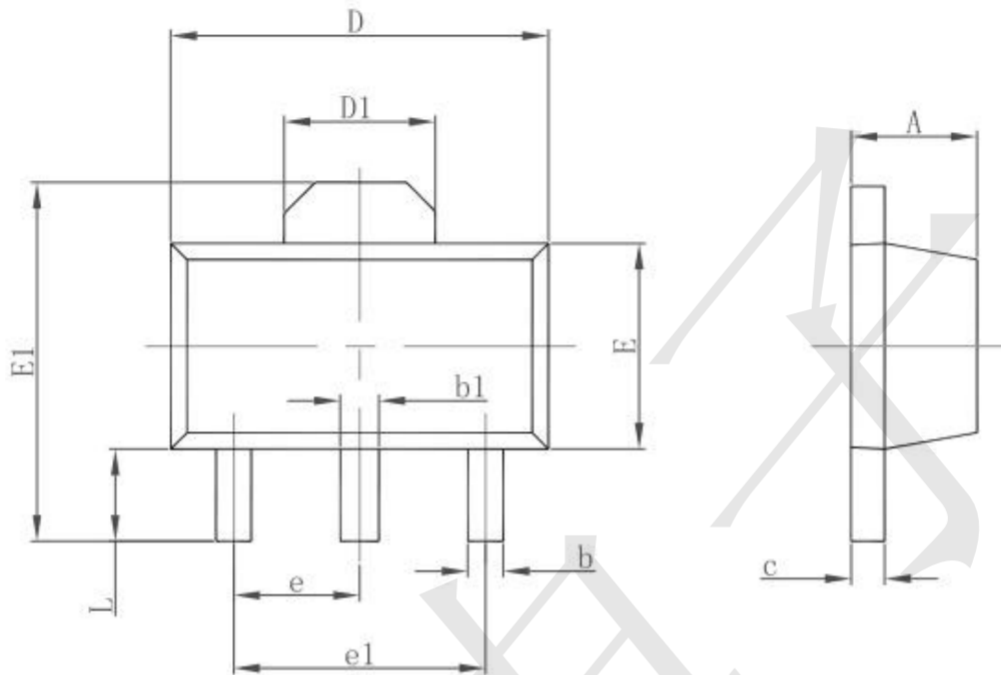
Typical Electrical Characteristic Curves



Package information

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SOT89-3



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	1.400	1.600	0.055	0.063
b	0.320	0.520	0.013	0.020
b1	0.400	0.580	0.016	0.023
c	0.350	0.440	0.014	0.017
D	4.400	4.600	0.173	0.181
D1	1.550 REF.		0.061 REF.	
E	2.300	2.600	0.091	0.102
E1	3.940	4.250	0.155	0.167
e	1.500 TYP.		0.060 TYP.	
e1	3.000 TYP.		0.118 TYP.	
L	0.900	1.200	0.035	0.047