SOT-23 Voltage Regulator in a SOT-23 Plastic Package.

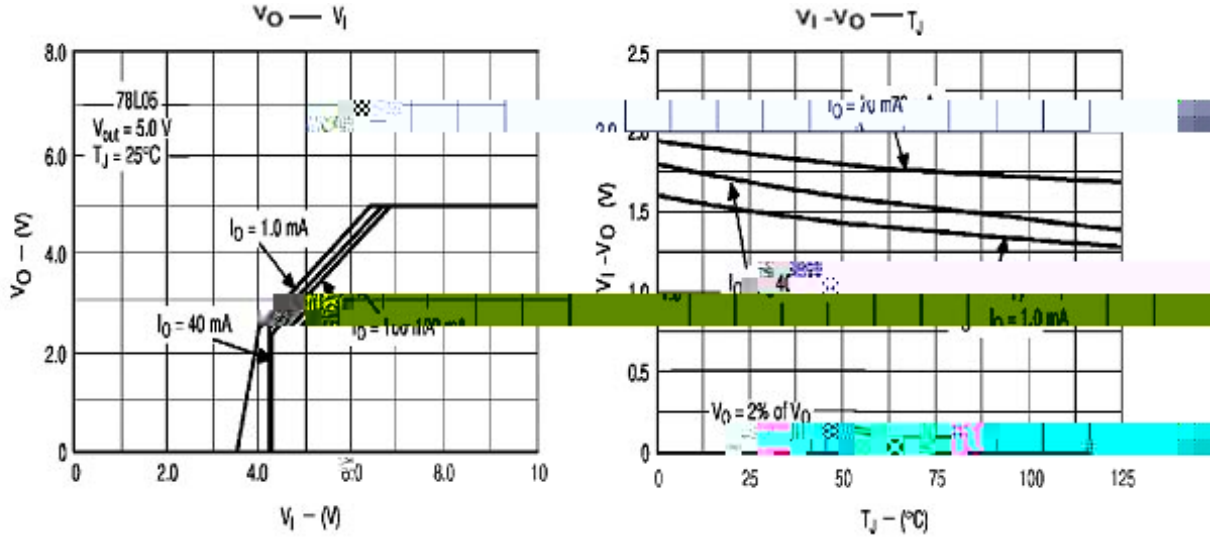
/ Absolute Maximum Ratings(Ta=25)

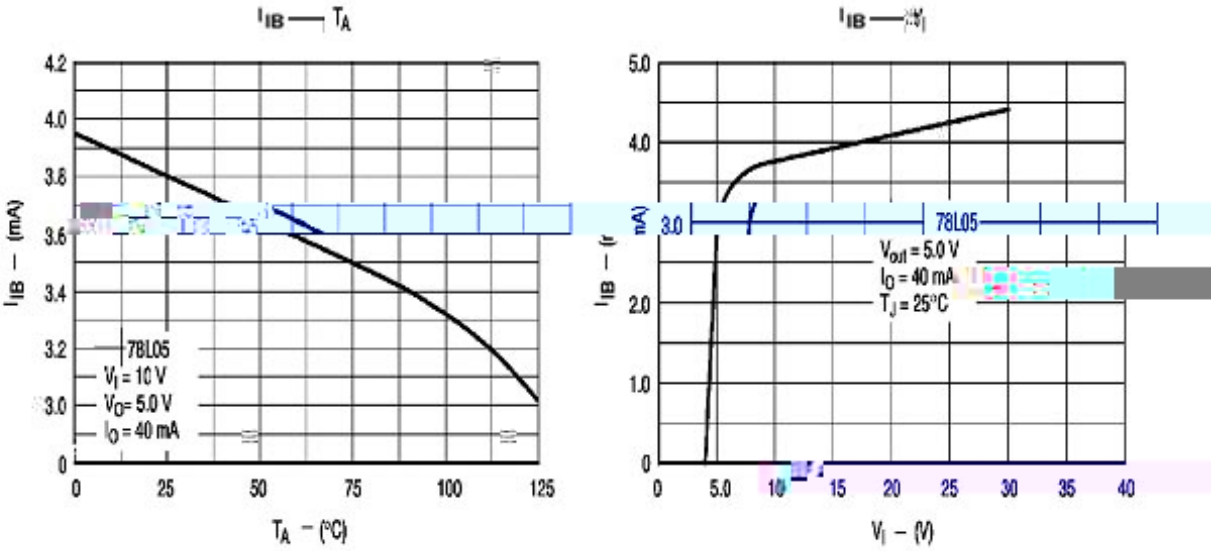
Parameter	Symbol	Rating	Unit
Input voltage	V_I	30	V
Output current	I_O	100	mA
Operating virtual Junction temperature	T_J	-40 125	
Power Dissipation	P_D	350	mW
Storage temperature range	T_{stg}	-65 150	

/ Electrical Characteristics(Ta=25 Vi=10V,Io=40mA unless otherwise specified)

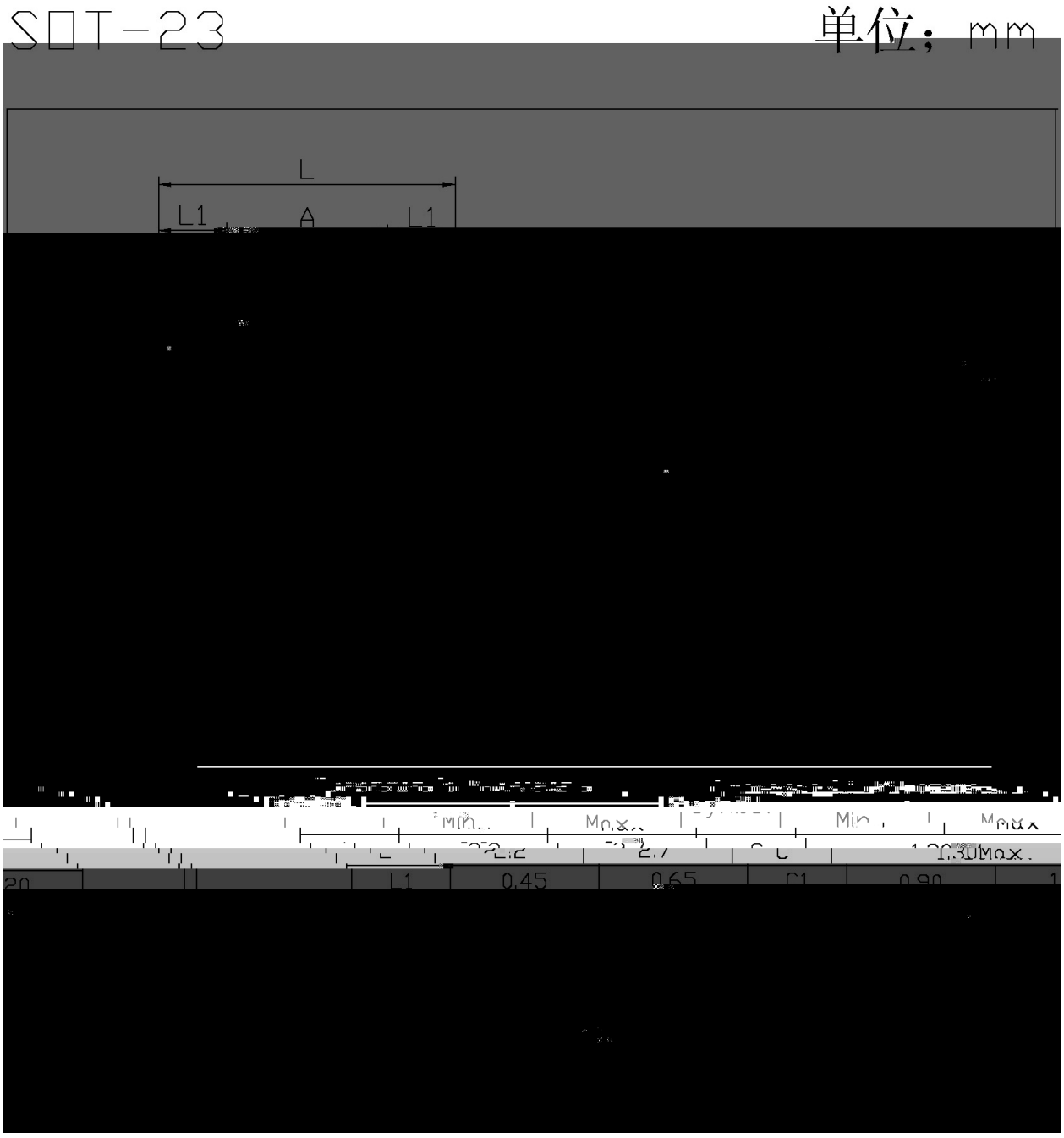
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Output voltage	V_O	I_o 40mA T_j=25	4.80	5.0	5.2	V
		I_O=1mA to 40mA V_I=7V to 20V	4.75	5.0	5.25	V
		I_O=1mA to 70mA V_I=10V	4.75	5.0	5.25	V
Input regulation	Vo	V_I=7V to 20V T_j=25		32	150	mV
		V_I=8V to 20V T_j=25		26	100	mV
Output regulation	V_O	I_O=1mA to 100mA T_j=25		15	60	mV
		I_O=1mA to 40 mA T_j=25		8	30	mV
Ripple rejection	RR	V_I=8V to 18V f=120Hz T_j=25	41	49		dB
Output noise voltage	V_N	f=10Hz~100KHz T_j=25		42		V
Dropout voltage	V_D	T_j=25		1.7		V
Bias current	I_Q	T_j=25		3.8	6	mA
		T_j=125			5.5	mA
Bias current change	I_Q	V_I=8V to 20V			1.5	mA
		I_O=1mA to 40mA			0.1	mA

/ Electrical Characteristic Curve

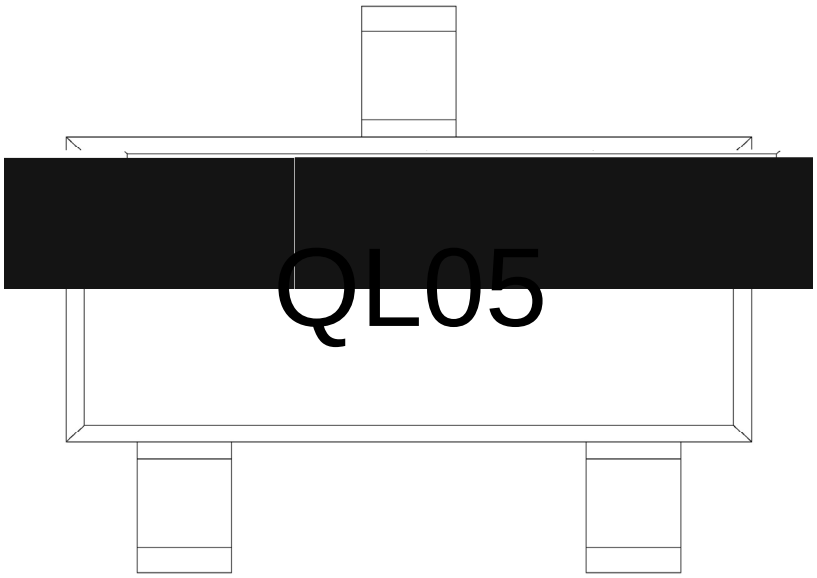




/ Package Dimensions



/ Marking Instructions



Q

L05

Note:

Q: Automobile halogen-free product Code

L05: Product Type Code

( ) / Temperature Profile for IR Reflow Soldering(Pb-Free)

Note:

1		150	200		60	120sec;	1.Preheating:150~200 , Time:60~120sec.
2		255±5				5±0.5sec;	2.Peak Temp.:255±5 , Duration:5±0.5sec.
3				2	10	/sec.	3. Cooling Speed: 2~10 /sec.

/ Resistance to Soldering Heat Test Conditions

260±5	10±1 sec.	Temp.:260±5	Time:10±1 sec

/ REEL