

Descriptions

- Three Terminal Positive Low Dropout Voltage Regulator

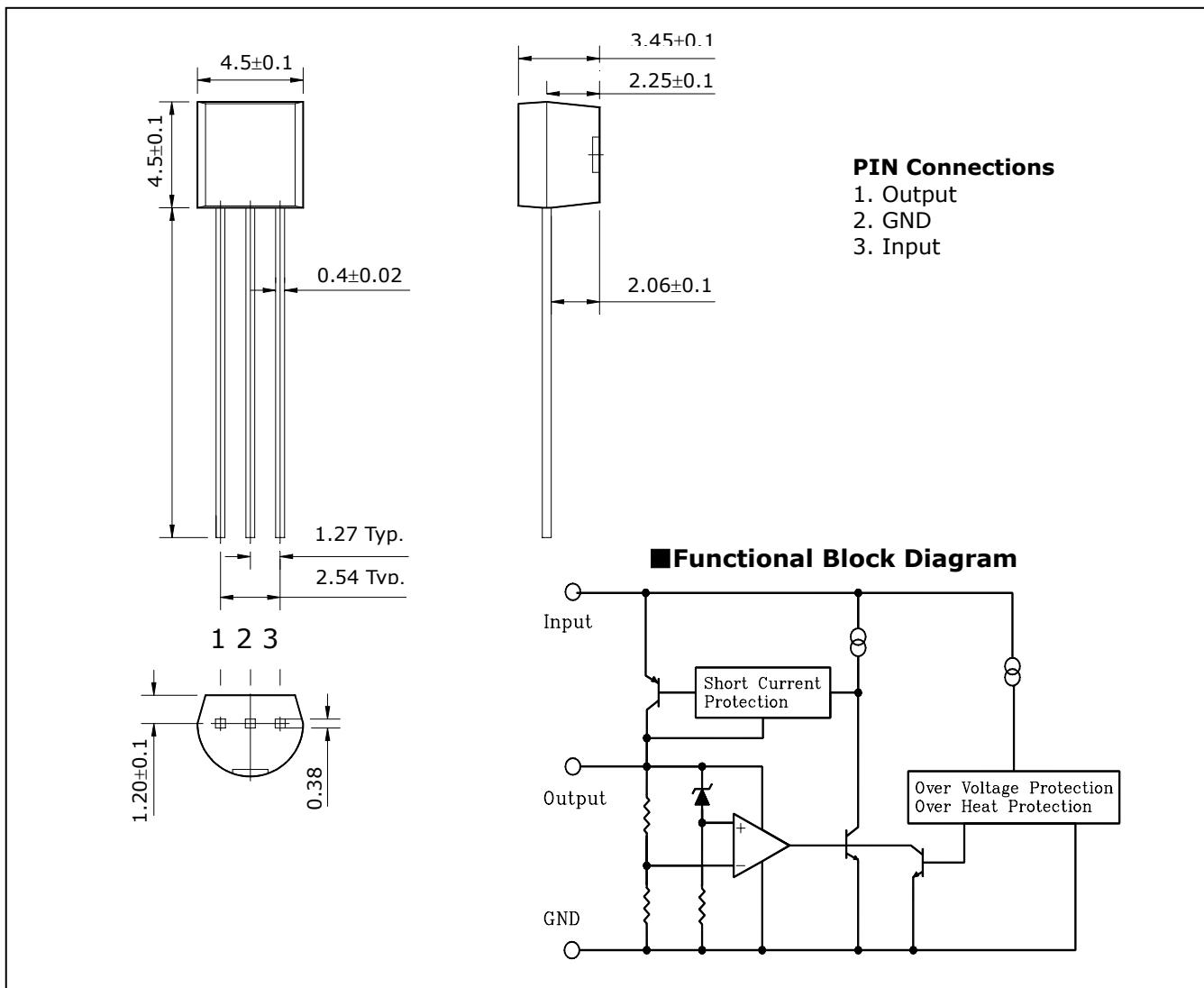
Features

- Low Standby Current Consumption (500 μ A Typ.)
- Maximum Output Current (150 mA Max.)
- Less I/O voltage Difference (0.7V Max.)

Ordering Information

Type NO.	Marking	Package Code
S78DL05	S78DL05	TO-92

Outline Dimensions

unit : mm


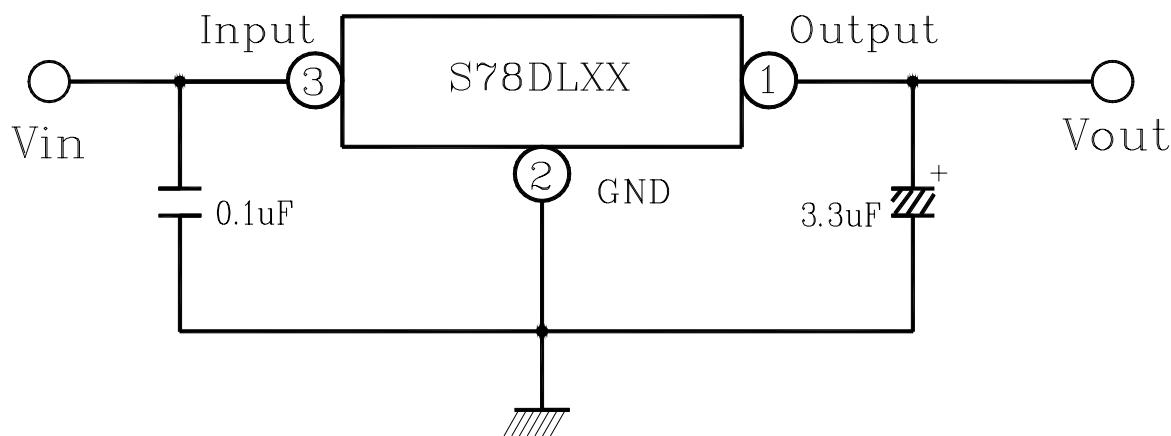
Maximum ratings

Ta=25°C

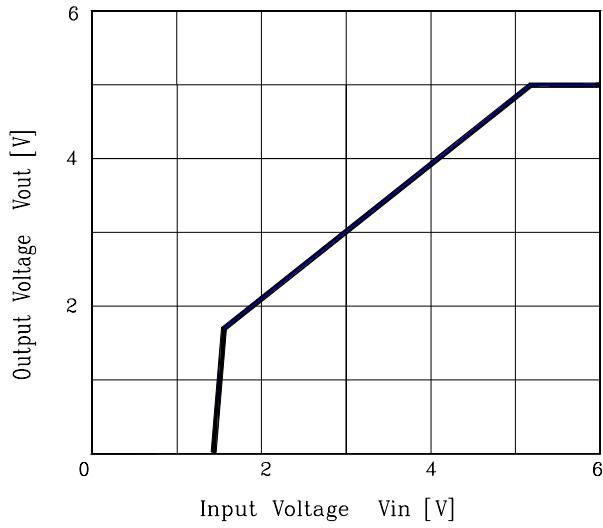
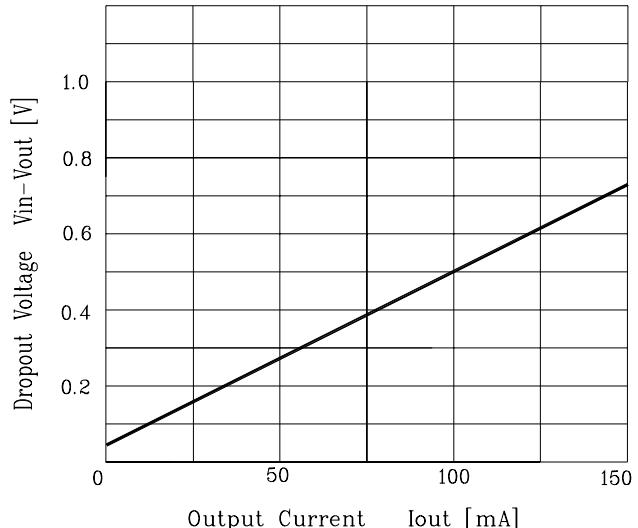
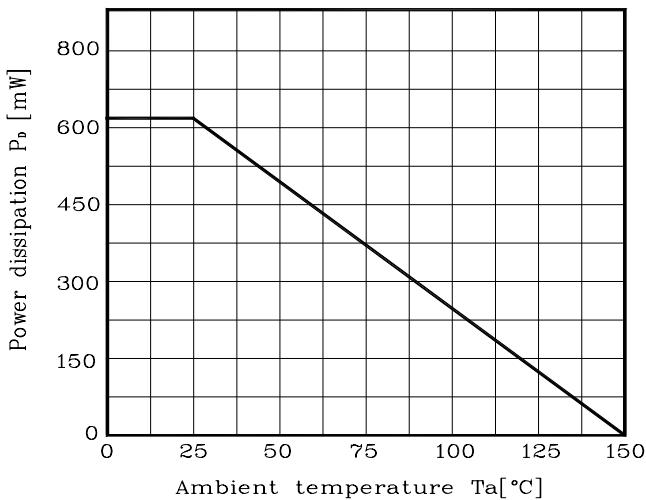
Characteristic	Symbol	Ratings	Unit
Operating Input voltage	V _{IN}	20	V
Power Dissipation	P _D	625	mW
Operating Temperature Range	T _{OPR}	-40~+85	°C
Junction Temperature	T _j	150	°C
Storage Temperature Range	T _{stg}	-55~150	°C
Lead Temperature Time	T _{sol}	260 (10 Sec)	°C

Electrical Characteristics(※ V_{IN}=10V, I_{OUT}=10 mA, T_j=25°C)

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Output voltage	V _{OUT}	V _{IN} =5.35V~20V , Ta=-40~85°C	4.8	5	5.2	V
Voltage Regulation	Δ V _{OUT} (1)	V _{IN} =6V~16V	-	10	30	mV
Load Regulation	Δ V _{OUT} (2)	I _{OUT} =10~100mA	-	12	50	mV
Quiescent Current	I _{CC}	I _{OUT} ≤ 10mA , V _{IN} =6V~20V	-	0.5	1	mA
Dropout Voltage	V _{DROP}	I _{OUT} =50mA	-	0.3	0.5	V
		I _{OUT} =100mA	-	0.5	0.7	
Maximum Operating Input Voltage	V _{IN}		20	29	-	V

■ Test circuit

Electrical Characteristic Curves

Fig. 1. Vin - Vout**Fig. 2 |Vout - Vin| - I_C****Fig. 3. Pd - Ta****Fig. 4. Icc - Vout**