/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Working Voltage	V_{IN}	-0.3~+20	V
Thermal Resistance	$R_{\theta JA}$	200	/W
Power Consumption	P_W	500	mW
Storage Temperature	T_{STG}	-50~+125	
Working Temperature	T_A	-40~+85	

Notes: If the device operating conditions over the maximum rating of the above-mentioned conditions, may cause permanent damage to the device. The above parameters is only part of the operating conditions the maximum, we do not recommend the device running outside the scope of this specification. If the device to work long hours under the condition of absolute maximum limit, its stability may be affected.

/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
The Output Voltage	V_{OUT}	V_{IN}=5.3V, I_{OUT}=10mA	3.234	3.30	3.366	V
The Output Current	I_{OUT}	V_{IN}=5.3V	300			mA
Load Regulation	V_{OUT}	V_{IN}=5.3V 1mA ≤ I_{OUT} ≤ 300mA		37	100	mV
Low Dropout	V_{DIF}	I_{OUT}=100mA, V_{OUT}=2%		195	300	mV
Static Power	I_{SS}	V_{IN}=5.3V		1.5	3.0	μA
Linear Regulation	V_{OUT}/V_{OUT}* V_{IN}	4.3V ≤ V_{IN} ≤ 20V I_{OUT}=1mA			0.2	%/V
The Input Voltage	V_{IN}				20	V
Temperature Coefficient	V_{OUT}/ T_A*V_{OUT}	V_{IN}=5.3V, I_{OUT}=10mA -40 ≤ T_A ≤ 85		100		ppm/

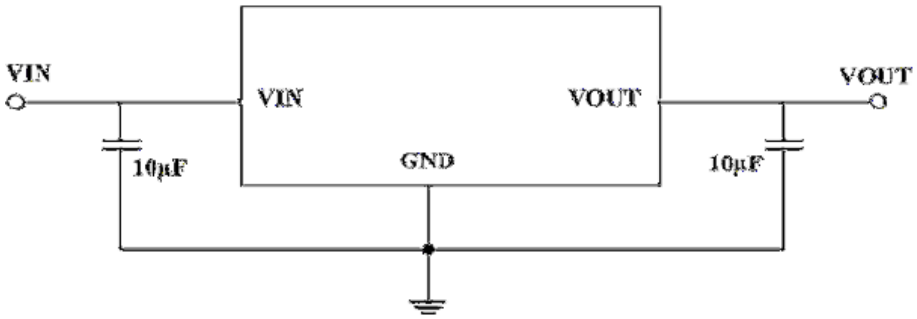
V_{IN}=5.3V 2%

V_{DIF}

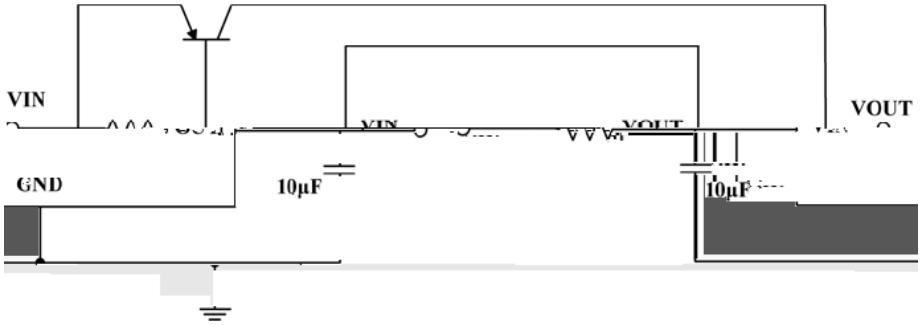
Note: V_{DIF} is defined as the input voltage minus the output voltage that produces a 2% change in the output voltage from the value at V_{IN}=5.3V with a fixed load.

/ Typical Application Circuit

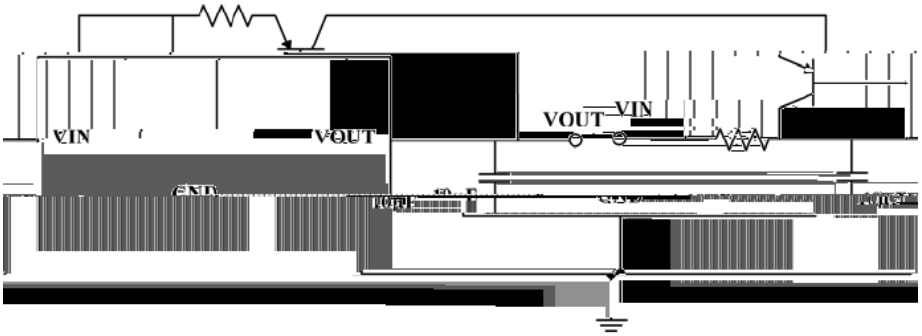
/ Basic Application



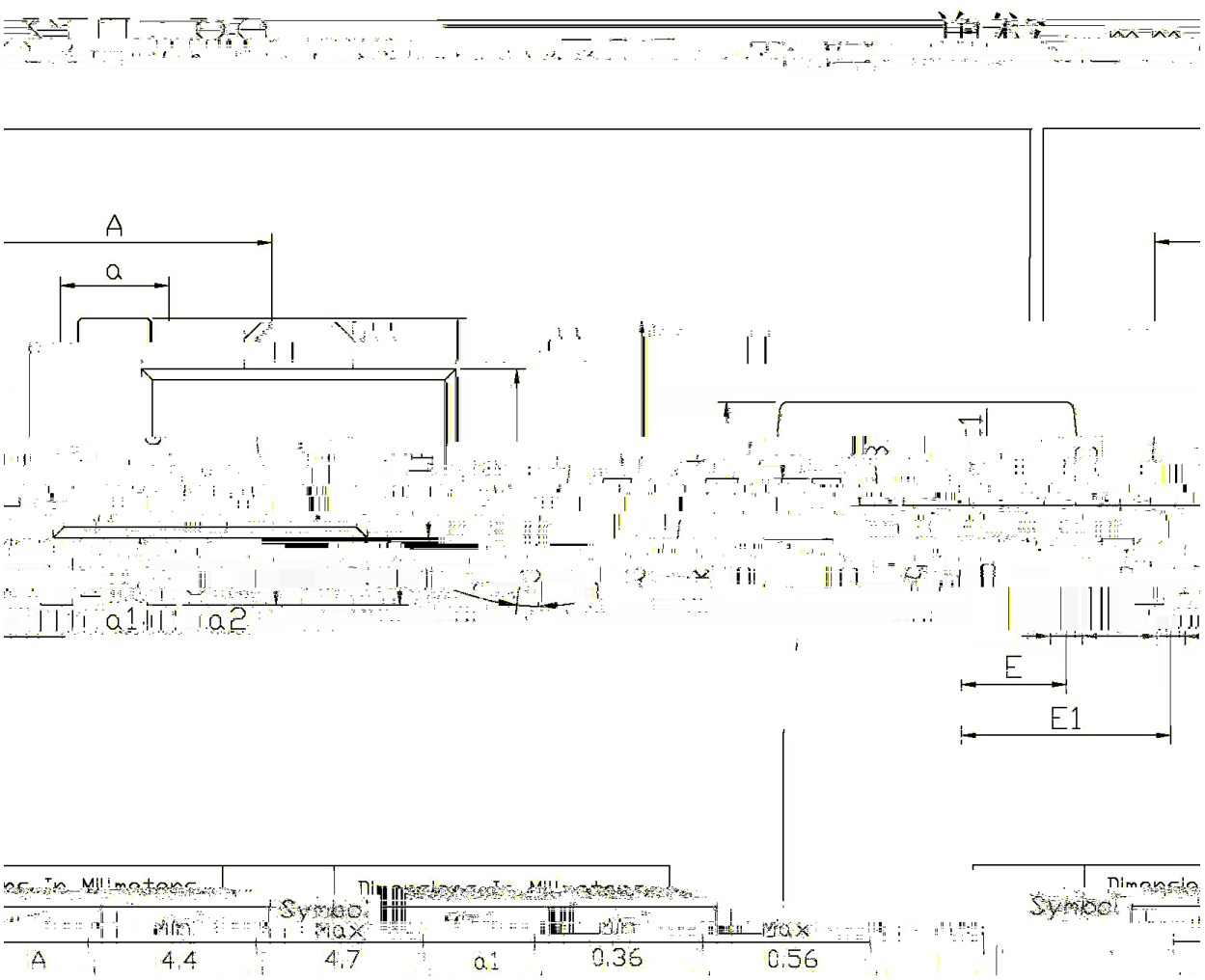
/ High Output Current Voltage Regulator



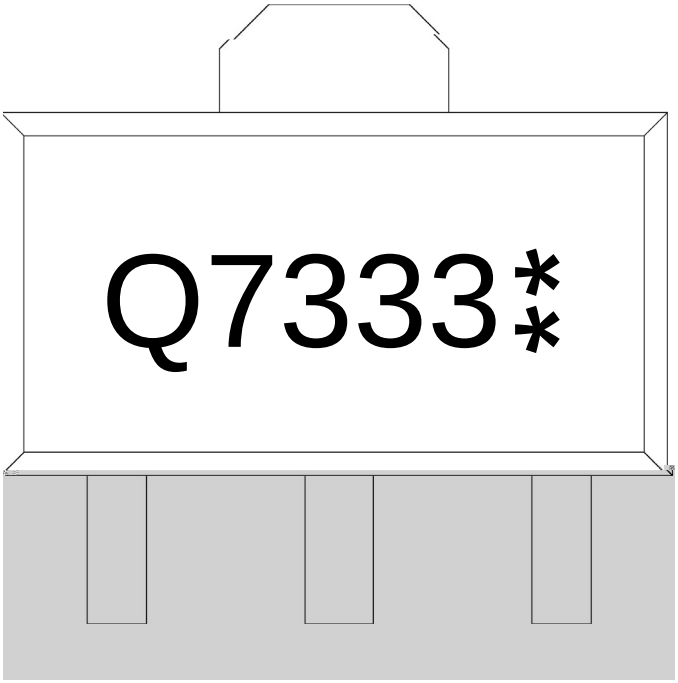
/ Short-Circuit Protection



/ Package Dimensions



/ Marking Instructions



Q

7333

**

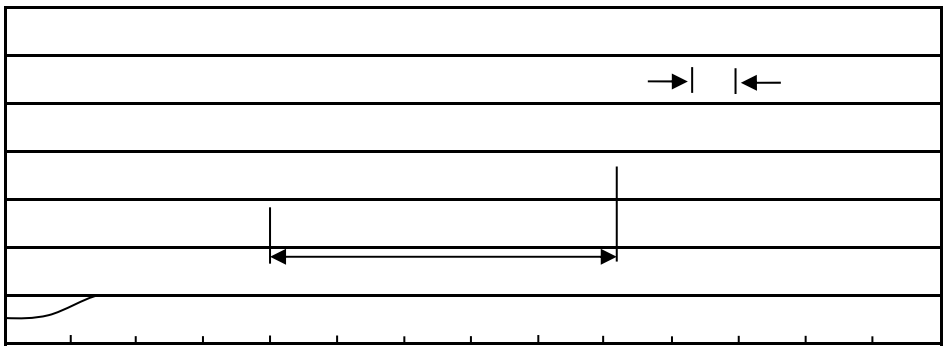
Note:

Q: Automobile halogen-free product Code

7333: Product Type

**: Lot No. Code, code change with Lot No

( ) /



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

/ Packaging SPEC.

/ REEL

Package Type	Units					Dimension		(unit mm3)
	Units/Reel /	Reels/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Reel	Inner Box	Outer Box
SOT-89	1,000	7	7,000	6	42,000	7 ×12	180×120×180	390×385×205

/ Notices