/ Descriptions

SOT-89 Voltage Regulator in a SOT-89 Plastic Package.

/ Features

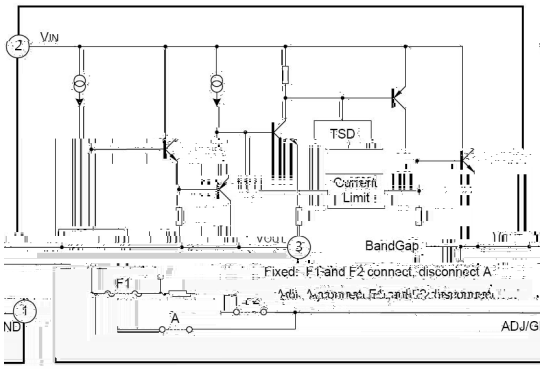
, 800mA, AEC-Q100

High efficiency, Low dropout voltage.output current up to 800mA, internal current and thermal limit, Qualified to AEC-Q100 Standards for High Reliability, HF Product.

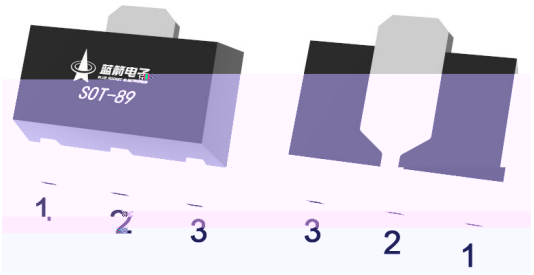
/ Applications

Voltage Regulator, Meet the stringent requirements of automotive applications.

/ Equivalent Circuit or Application Circuit



/ Pinning



Pin1 GND/ADJ Pin2 VOUT Pin3 VIN

/ Marking

See Marking Instructions.

/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Input voltage	V_I	15	V
Storage temperature range	T_{stg}	-40 150	

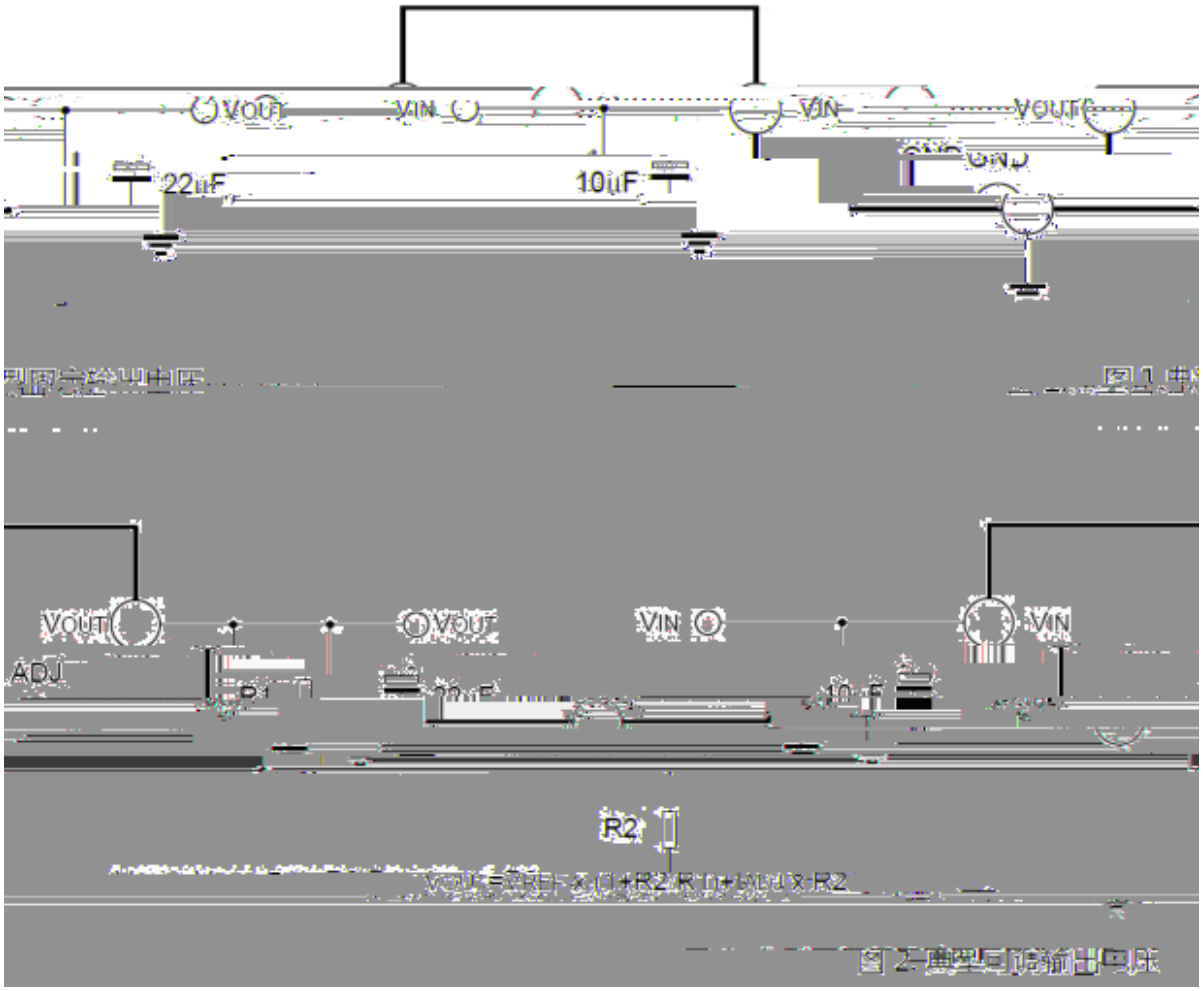
/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Type	Test Conditions	Min	Typ	Max	Unit
Reference Voltage	Vref	BRLD1117TQ- Adj	Vin-Vo=2V T_j=25 Io=10mA	1.225	1.25	1.275	V
			10mA Io 800mA 1.4V (Vin-Vo) 10V	1.225	1.25	1.275	
Output Voltage	Vo	BRLD1117TQ-1.2	Vin=3.2V T_j=25 Io=10mA	1.176	1.2	1.224	V
			10mA Io 800mA, 3V Vin 8V	1.176	1.2	1.224	
		BRLD1117TQ-1.8	Vin=3.8V T_j=25 Io=10mA	1.764	1.8	1.836	V
			0 Io 800mA, 3.3V Vin 8V	1.764	1.8	1.836	
		BRLD1117TQ-2.5	Vin=4.5V T_j=25 Io=10mA	2.45	2.5	2.55	V
			0 Io 800mA, 3.9V Vin 10V	2.45	2.5	2.55	
		BRLD1117TQ-3.3	Vin=5.3V T_j=25 Io=10mA	3.234	3.3	3.366	V
			0 Io 800mA, 4.75V Vin 10V	3.234	3.3	3.366	
		BRLD1117TQ-5.0	Vin=7V T_j=25 Io=10mA	4.9	5	5.1	V
			0 Io 800mA, 6.5V Vin 15V	4.9	5	5.1	
Load Regulation	Vo	BRLD1117TQ-Adj	Vin-Vo=3V 10mA Io 800mA			30	mV
		BRLD1117TQ-1.2	Vin=3V 10mA Io 800mA			30	mV
		BRLD1117TQ-1.8	Vin=3.3V 0mA Io 800mA			30	mV
		BRLD1117TQ-2.5	Vin=3.9V 0mA Io 800mA			30	mV
		BRLD1117TQ-3.3	Vin=4.75V 0mA Io 800mA			30	mV
		BRLD1117TQ-5.0	Vin=6.5V 0mA Io 800mA			30	mV

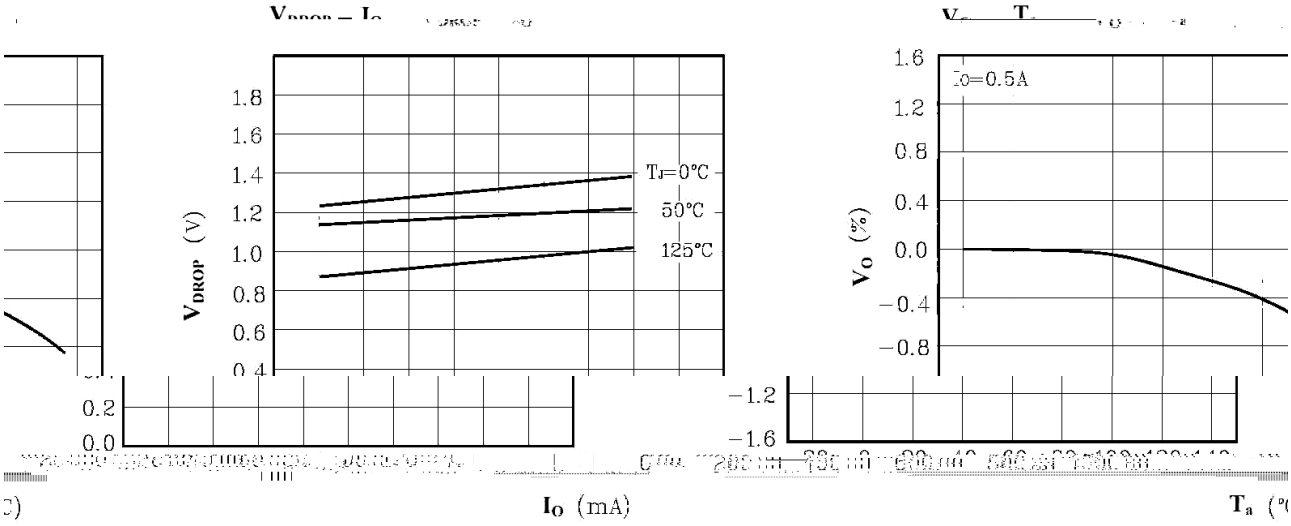
Parameter	Symbol	Type	Test Conditions	Min	Typ	Max	Unit
		BRLD1117TQ-Adj	Io=10mA 1.5V (Vin-Vo) 13.75V			23	mV

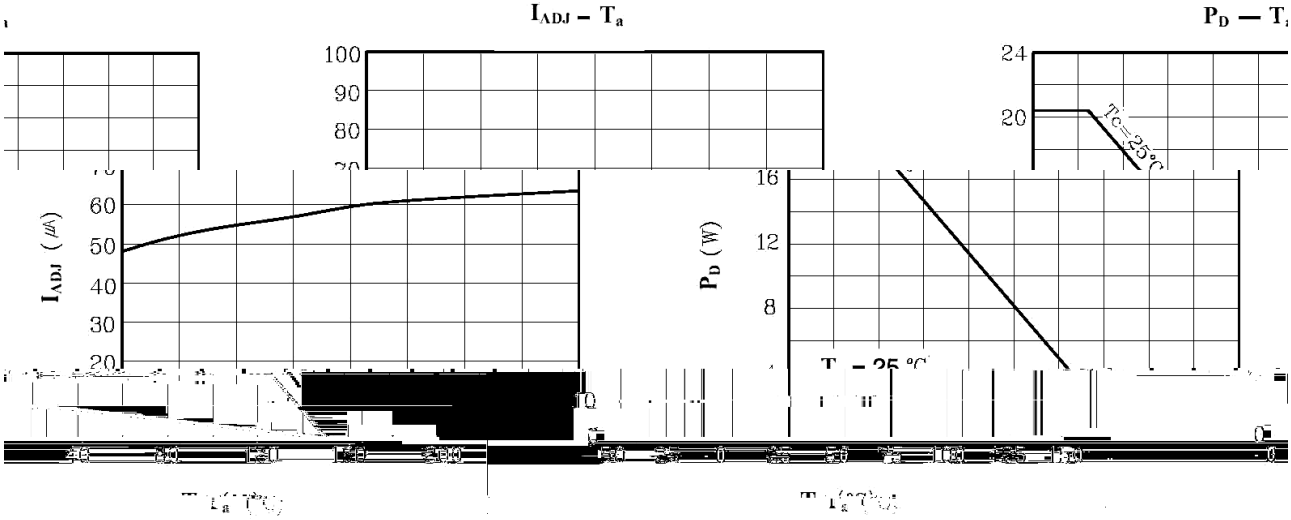
Line Regulation Vo

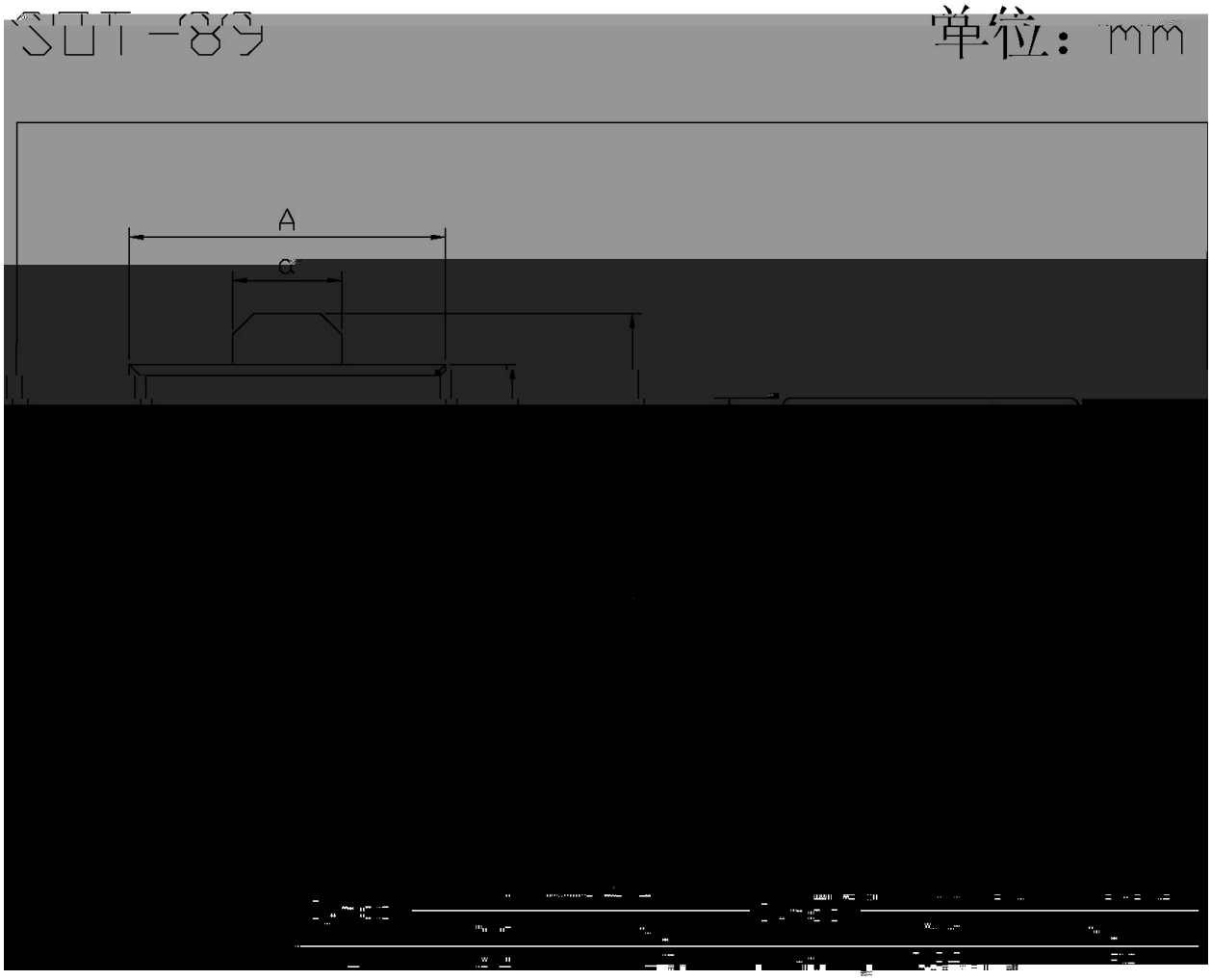
/ Typical Application Circuit



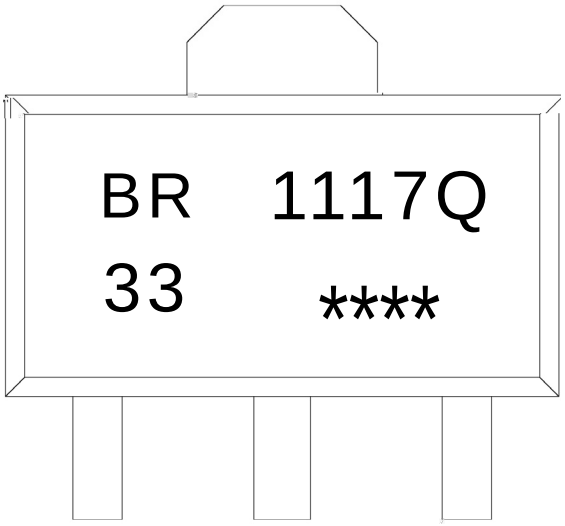
/ Electrical Characteristic Curve






SOT-89
单位：mm
A
C

/ Marking Instructions



BR

1117

Q

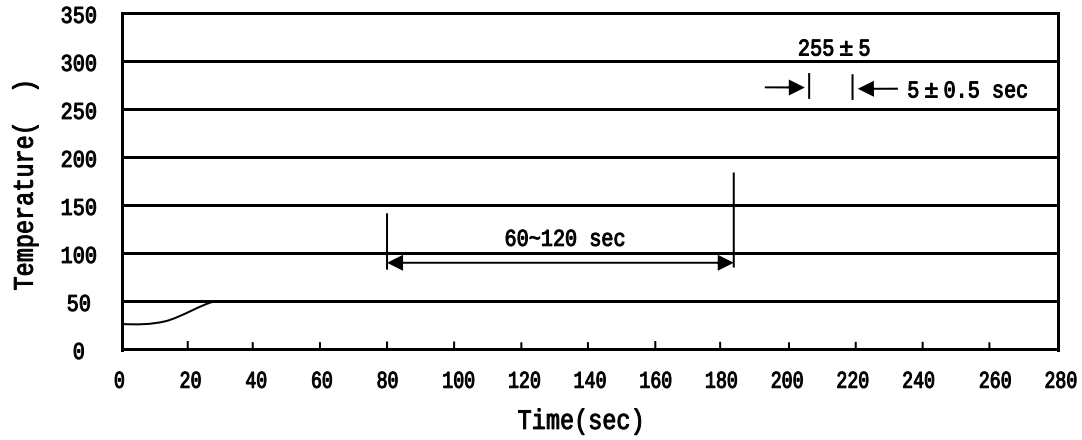
33: 3.3V

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Note:

BR:	Company Code
1117:	Product Type Code
Q:	Automobile halogen-free product Code
33:	On Behalf 3.3V
****:	Lot No. Code, code change with Lot No

( ) / 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

/ 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