

/ Descriptions

Low dropout linear regulator in a SOT23-3 Plastic Package .

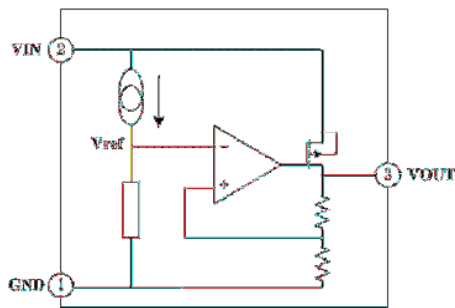
/ Features

Low power consumption,Low voltage drop,Small temperature drift coefficient,High input voltage up to 30V,The static current 2.5 A,The output voltage accuracy .HF Product.

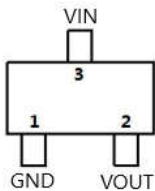
/ Applications

For use in power equipment,Communication equipment,Audio and video equipment.

/ Equivalent Circuit



/ Pinning



1	GND		3	VIN	
2	VOUT				

/ Marking

See Marking Instructions.

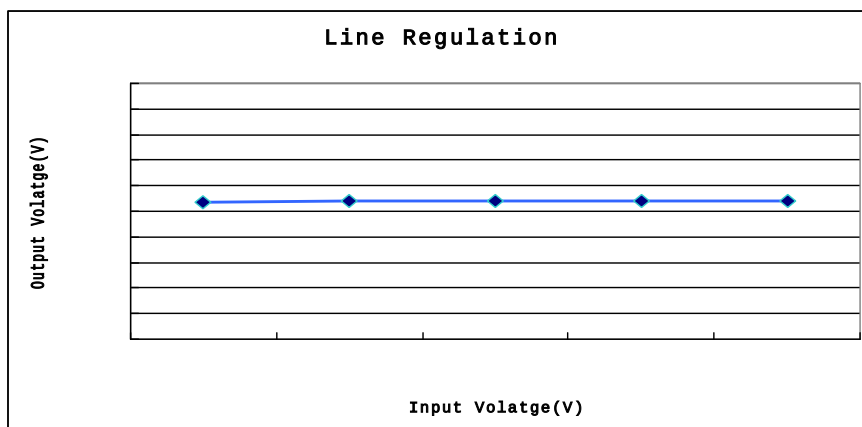
Parameter	Symbol	Rating	Unit
Working Voltage	V_{IN}	-0.3~33	V
Thermal Resistance	$R_{\theta JA}$	250	/W
Power Consumption	P_D	400	mW
Storage Temperature	T_{STG}	-50~+125	
Working Temperature	T_A	-40~+85	

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.

Parameter	Symbol	Test Conditions	Min
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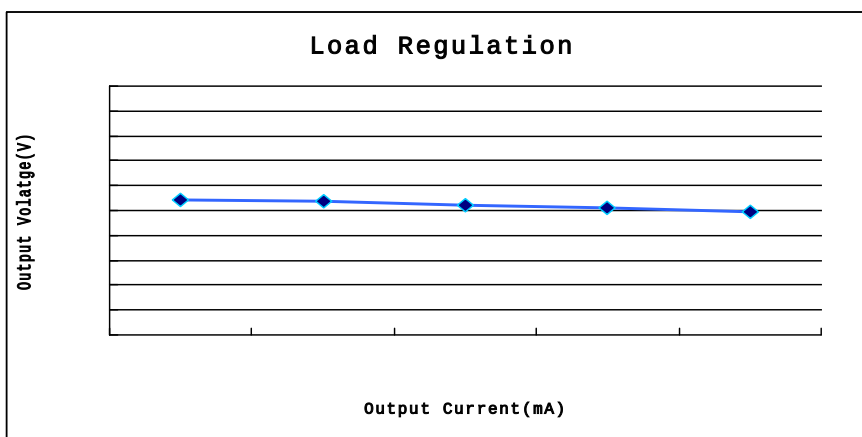
/ Electrical Characteristic Curve

/ The input voltage and output voltage



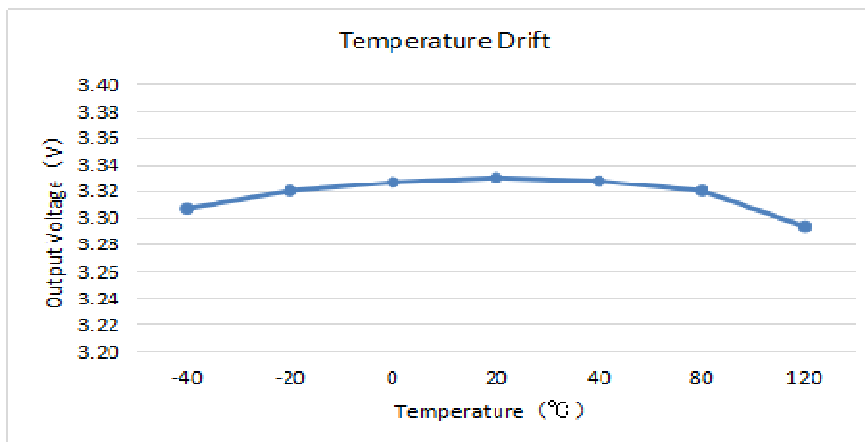
$I_{OUT}=10mA$

/ The output voltage and load current



$V_{IN}=5.3V$

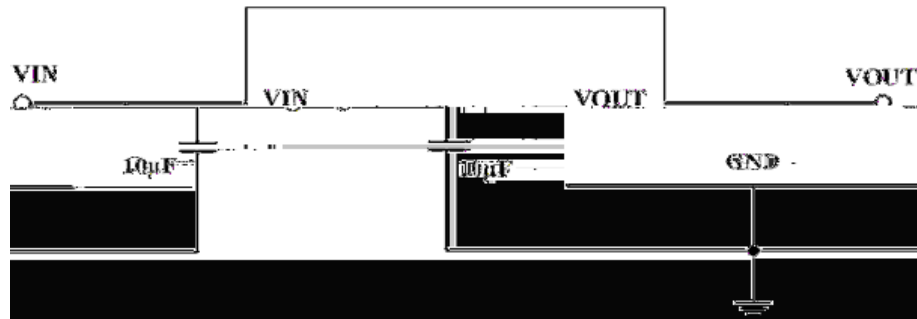
/ The output voltage and temperature



$I_{OUT}=10mA$

/ Typical Application Circuit

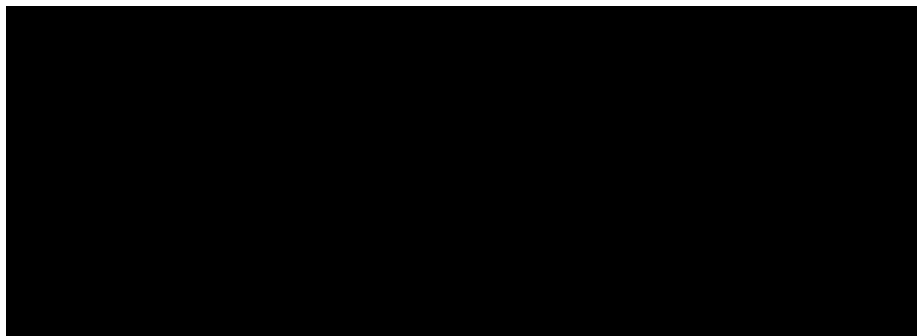
/ Basic Application



/ High Output Current Voltage Regulator

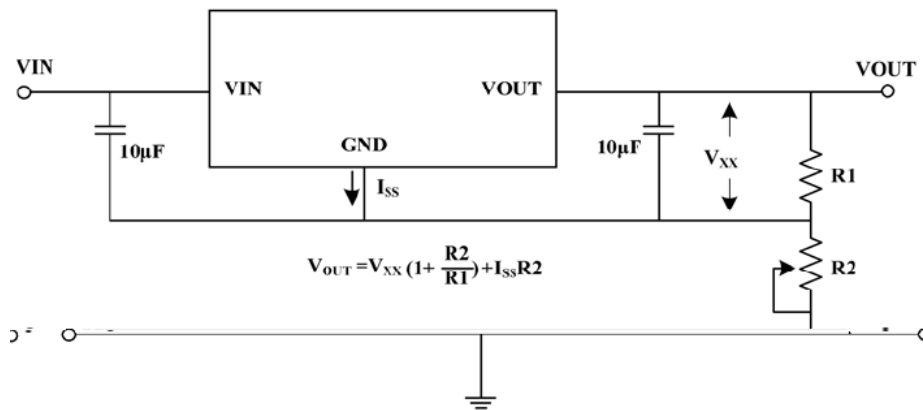


/ Short-Circuit Protection

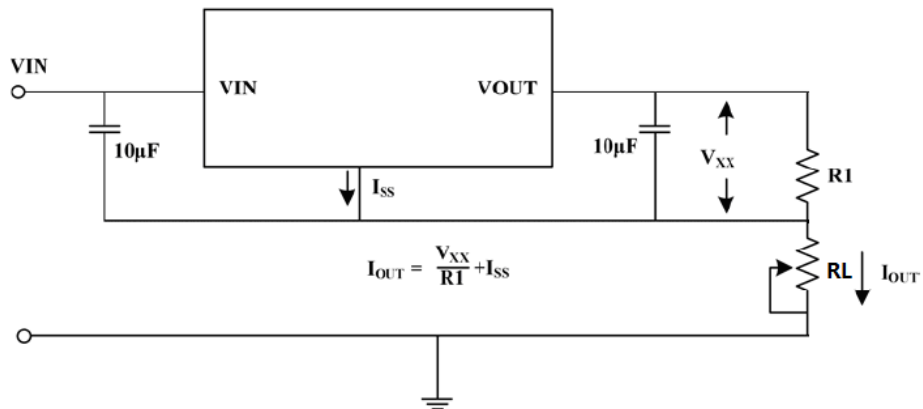


/ Typical Application Circuit

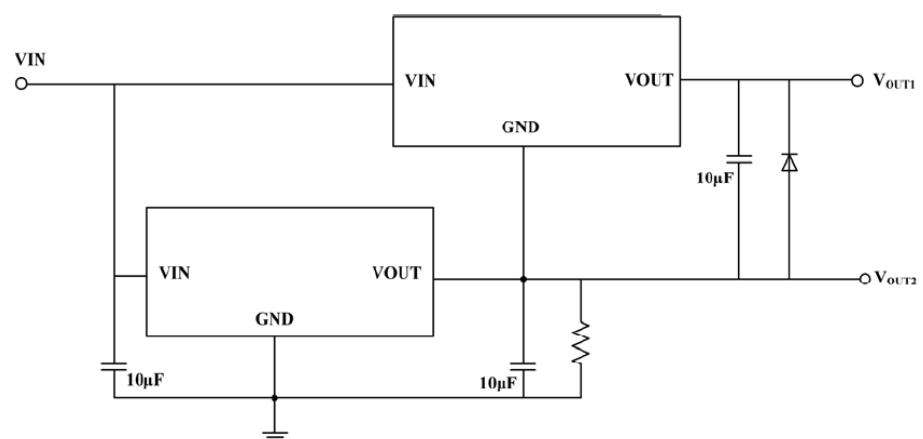
/ Circuit for Increasing Output Voltage



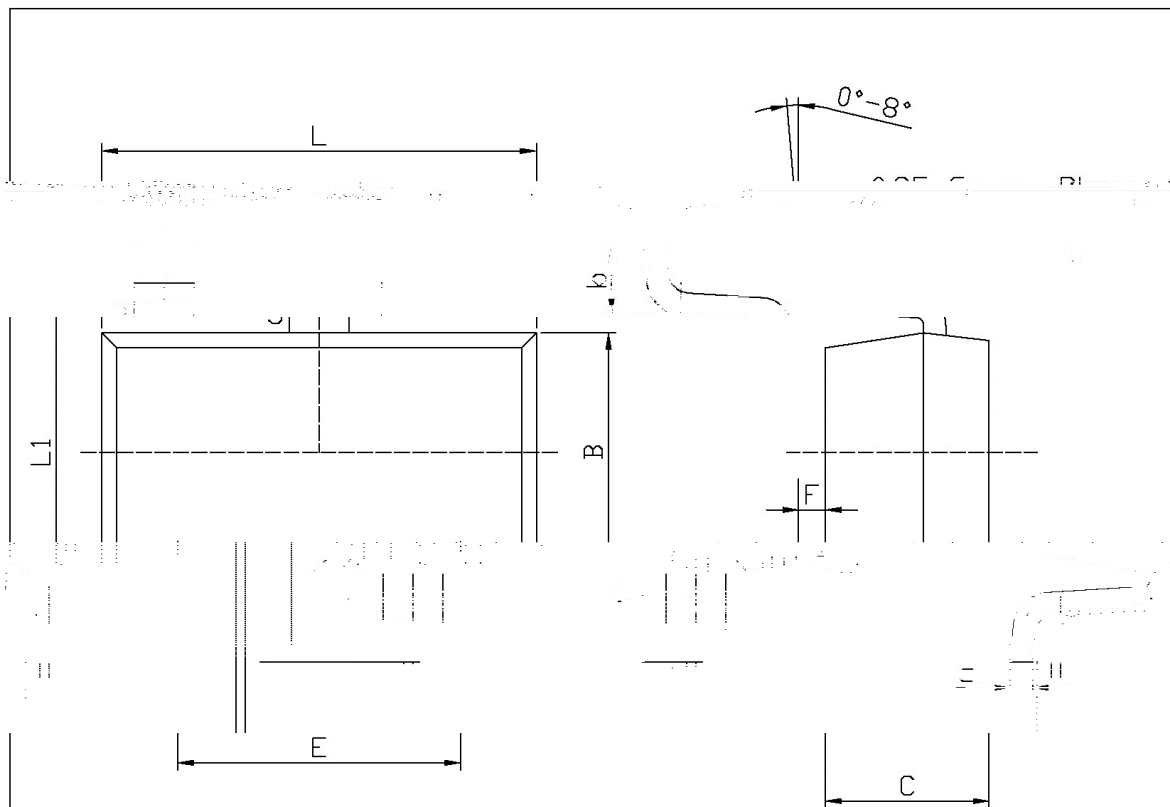
/ Constant Current Regulator



/ Double Output Circuit



/ Package Dimensions



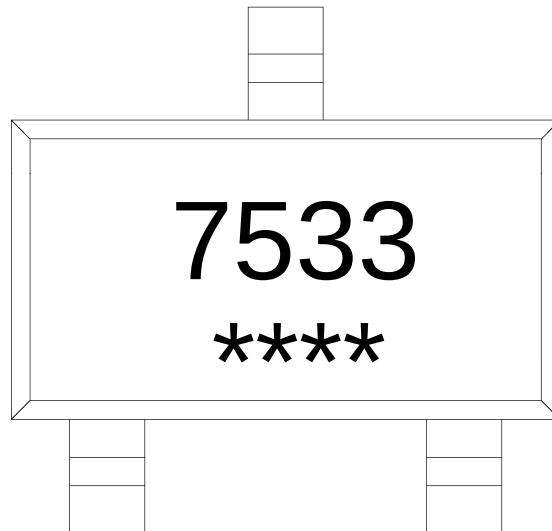
Unit: mm

Symbol	Dimensions In Millimeters		Symbol	Dimensions In Millimeters	
	Min	Max		Min	Max
L	2.82	3.02	a	0.35	0.50
B	1.50	1.70	c	0.10	0.20
C	0.90	1.30	b	0.35	0.55
L1	2.60	3.00	F	0	0.15

- 23-3

SOT

/ Marking Instructions



7533

Note:

7533: Product Type.

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

BRC07533MC
Rev.B Apr.-2021