



# Electrical Characteristics

(Unless otherwise specified, condition shall be  $V_{IN}=5V$ ,  $V_O=3V$  ( $R_1=1k\Omega$ ),  $I_O=0.5A$ ,  $V_C=2.7V$ ,  $T_a=25^\circ C$ )

Parameter	Symbol	Conditions	MIN.	TYP.	MAX.	Unit
Input voltage	$V_{IN}$	—	2.35	—	10	V
Output voltage	$V_O$	—	1.5	—	7	V
Reference voltage	$V_{ref}$	—	1.225	1.25	1.275	V
Load regulation	$R_{regL}$	$I_O=5mA$ to $1A$	—	0.2	2	%
Line regulation	$R_{regI}$	$V_{IN}=4$ to $8V$ , $I_O=5mA$	—	0.2	1	%
Temperature coefficient of reference voltage	$T_C V_{ref}$	$T_j=0$ to $125^\circ C$ , $I_O=5mA$	—	$\pm 1.0$	—	%
Ripple rejection	RR	Refer to Fig.2	45	60	—	dB
Dropout voltage	$V_{I-O}$	$V_{IN}=2.85V$ , $I_O=0.5A$	—	—	0.5	V
*4 ON-state voltage for control	$V_{C(ON)}$	—	2.0	—	—	V
ON-state current for control	$I_{C(ON)}$	—	—	—	200	$\mu A$
OFF-state voltage for control	$V_{C(OFF)}$	$I_O=0A$	—	—	0.8	V
OFF-state current for control	$I_{C(OFF)}$	$I_O=0A$ , $V_C=0.4V$	—	—	2	$\mu A$
Quiescent current	$I_q$	$I_O=0A$	—	1	2	mA
Output OFF-state dissipation current	$I_{qs}$	$I_O=0A$ , $V_C=0.4V$	—	—	5	$\mu A$

\*4 In case of opening control terminal ②, output voltage turns off.

Fig.1 Test Circuit

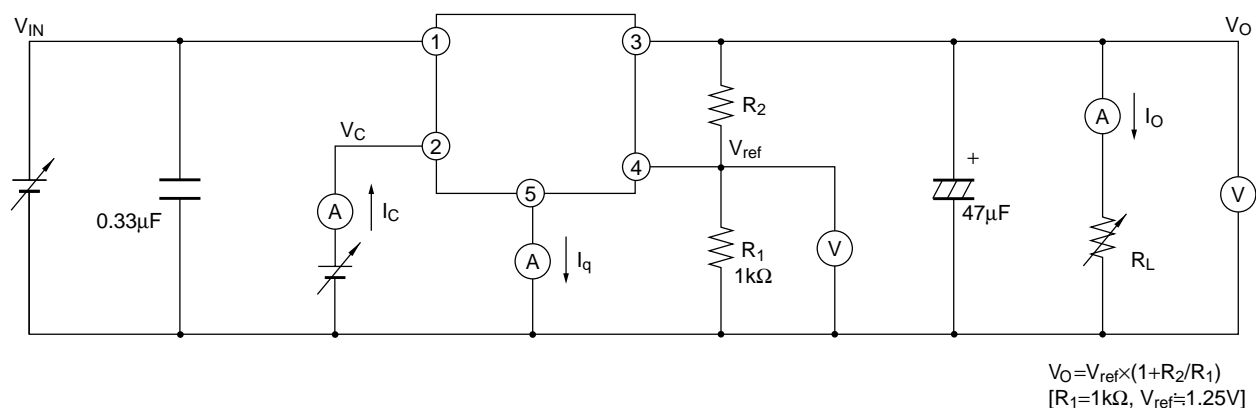
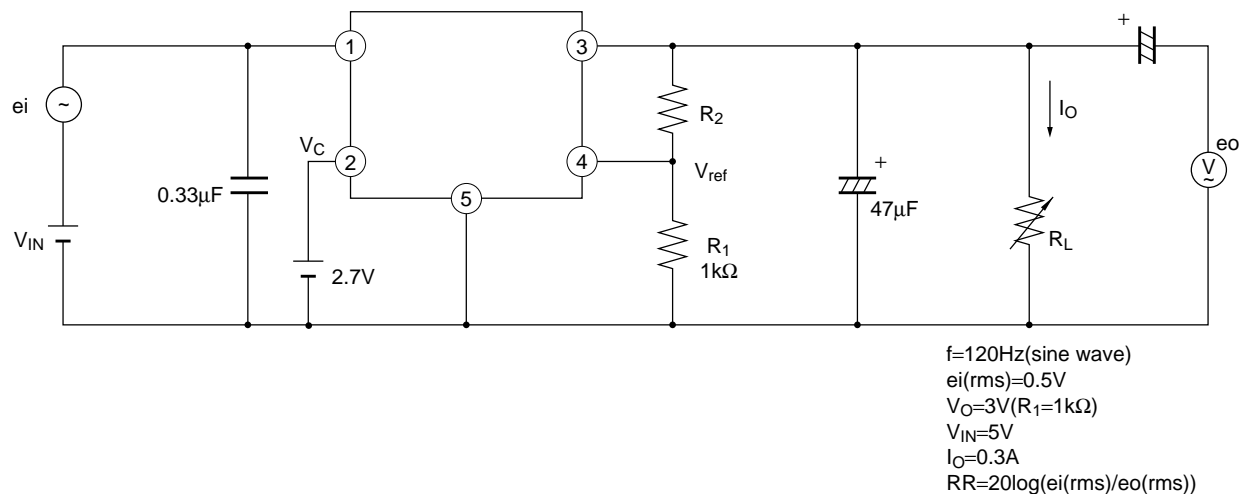
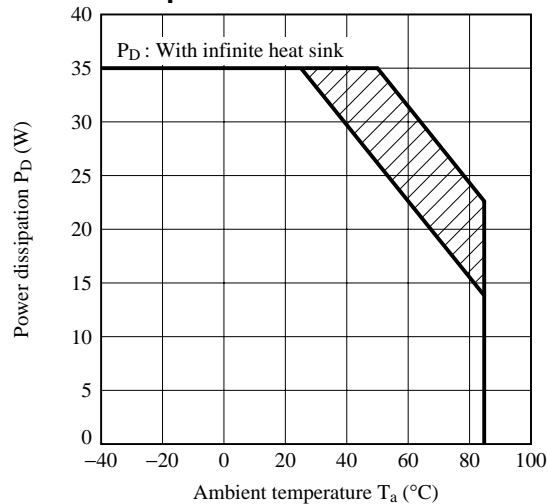
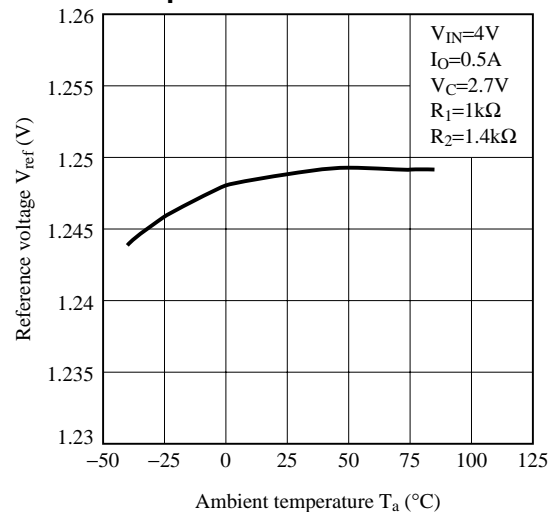
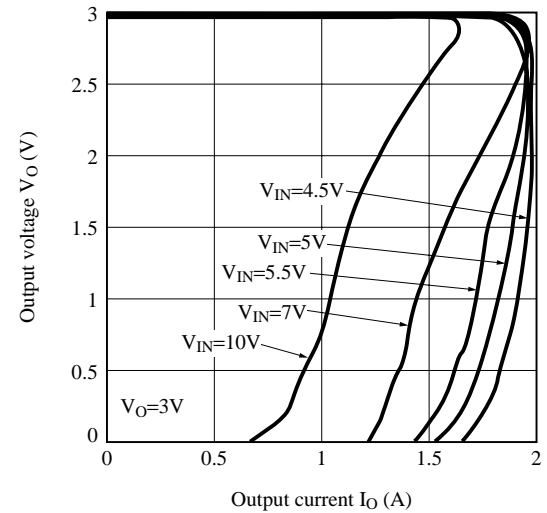
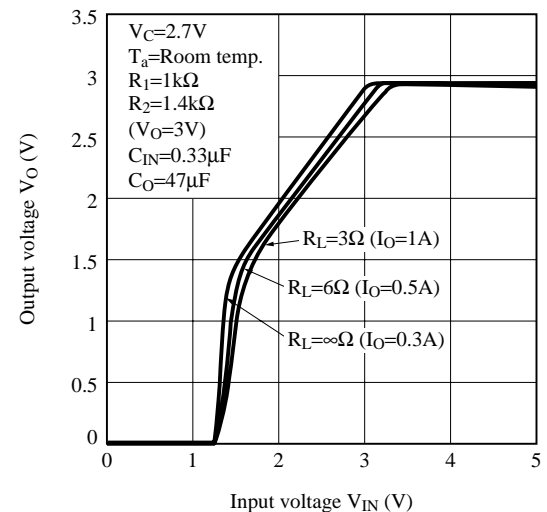
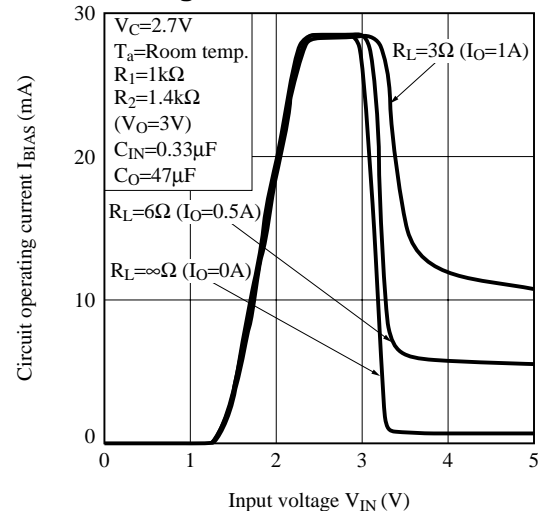
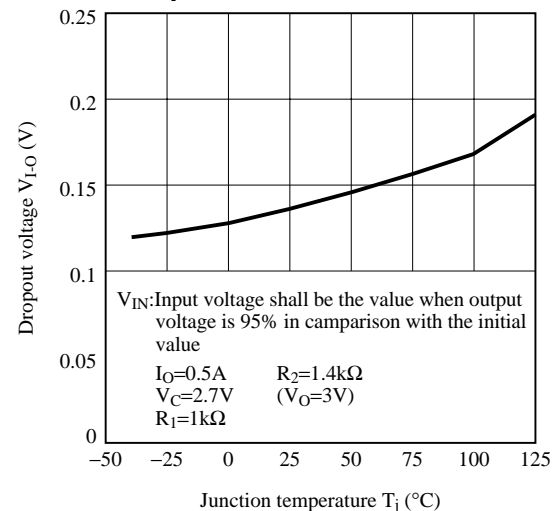


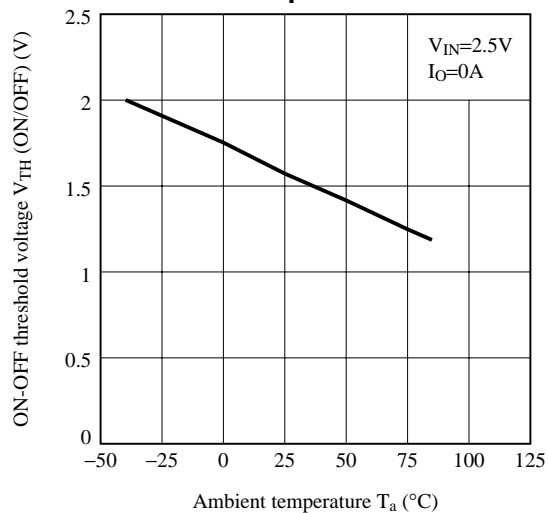
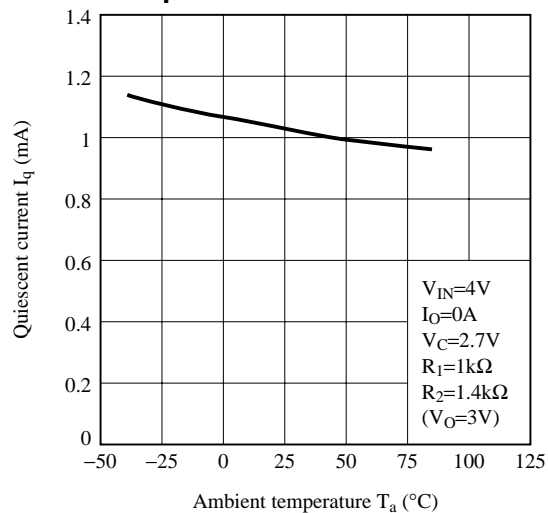
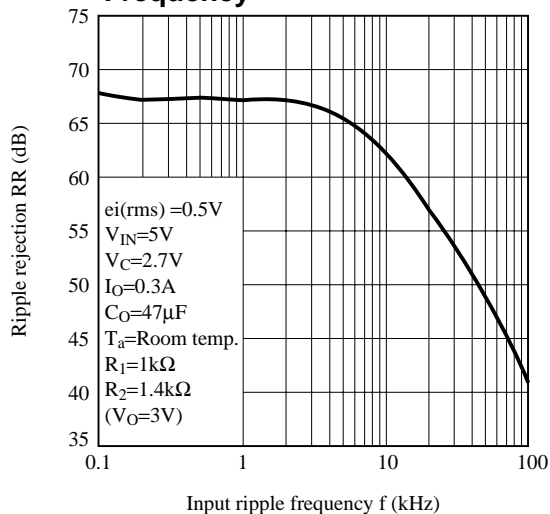
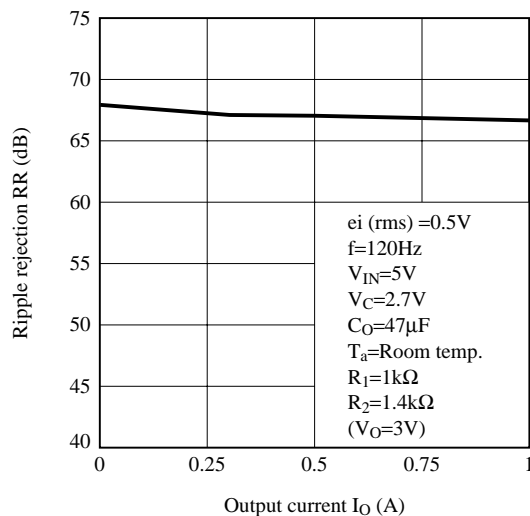
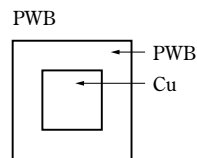
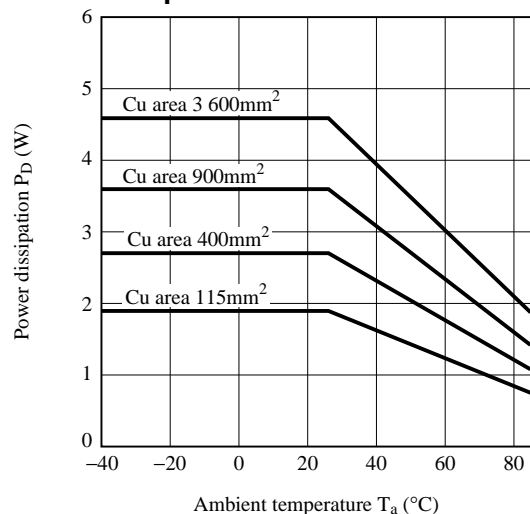
Fig.2 Test Circuit for Ripple Rejection



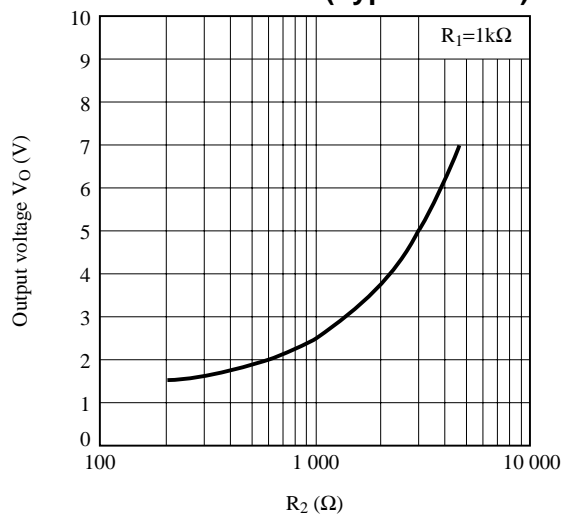
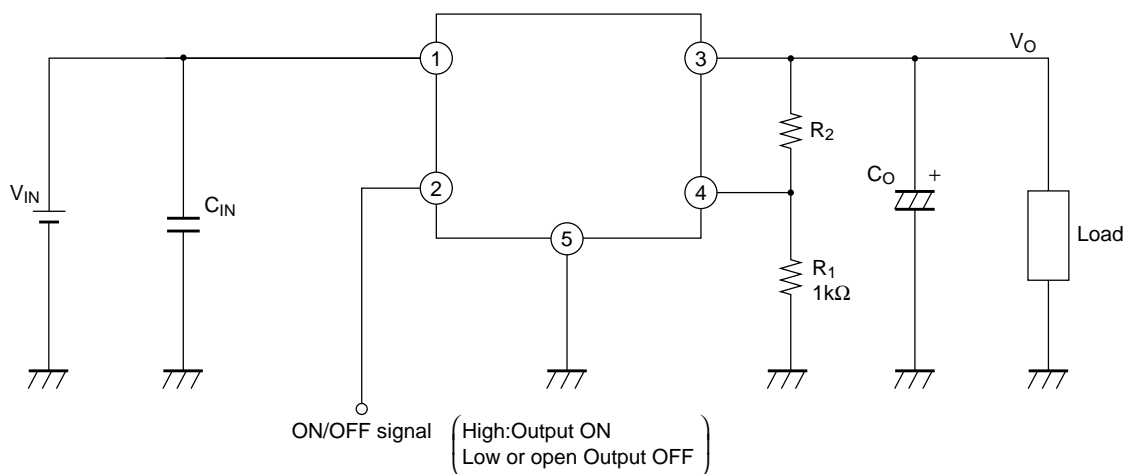
**Fig.3 Power Dissipation vs. Ambient Temperature**

Note) Oblique line portion: Overheat protection may operate in this area.

**Fig.5 Reference Voltage vs. Ambient Temperature****Fig.4 Overcurrent Protection Characteristics****Fig.6 Output Voltage vs. Input Voltage****Fig.7 Circuit Operating Current vs. Input Voltage****Fig.8 Dropout Voltage vs. Junction Temperature**

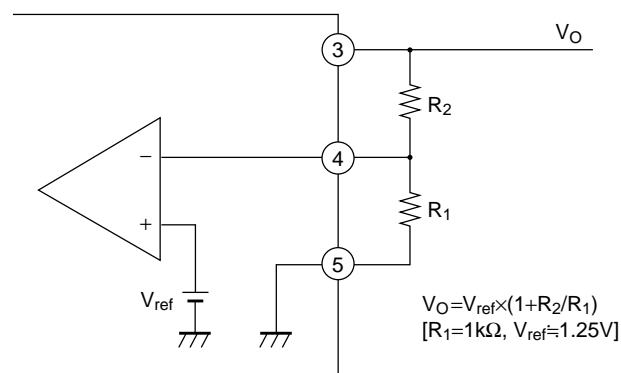
**Fig.9 ON-OFF Threshold Voltage vs. Ambient Temperature****Fig.10 Quiescent Current vs. Ambient Temperature****Fig.11 Ripple Rejection vs. Input Ripple Frequency****Fig.12 Ripple Rejection vs. Output Current****Fig.13 Power Dissipation vs. Ambient Temperature**

Material : Glass-cloth epoxy resin  
Size : 60×60×1.6mm  
Cu thickness : 65μm

**Fig.14 Output Voltage Adjustment Characteristics (Typical Value)****Fig.15 Typical Application**

### Setting of Output Voltage

Output voltage is able to set from 1.5V to 7V when resistors  $R_1$  and  $R_2$  are attached to ③, ④, ⑤ terminals. As for the external resistors to set output voltage, refer to the figure below and Fig.14.



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