



## 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
Load regulation	$Reg_L$	$I_O=5mA$ to 1A	-	0.2	2.0	%
Line regulation	$Reg_I$	$V_{IN}=4$ to 8V, $I_O=5mA$	-	0.2	1.0	%
Ripple rejection	RR	Refer to Fig.2	-	60	-	dB
Dropout voltage	$V_{I-O}$	$V_{IN}=2.85V, I_O=0.5A$	-	-	0.5	V
Reference voltage	$V_{ref}$	-	1.225	1.25	1.275	V
Temperature coefficient of reference voltage	$T_C V_{ref}$	$T_j=0$ to $+125^\circ C, I_O=5mA$	-	$\pm 1.0$	-	%
ON-state voltage for control	$V_{C(ON)}$	*4	2.0	-	-	V
ON-state current for control	$I_{C(ON)}$	-	-	-	200	$\mu A$
OFF-state voltage for control	$V_{C(OFF)}$	$I_O=0mA$	-	-	0.8	V
OFF-state current for control	$I_{C(OFF)}$	$I_O=0mA, V_C=0.4V$	-	-	2	$\mu A$
Quiescent current	$I_q$	$I_O=0A$	-	1	2	mA
Output OFF-state dissipation current	$I_{qs}$	$V_C=0.4V$	-	-	5	$\mu A$

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

Fig.1 Test Circuit

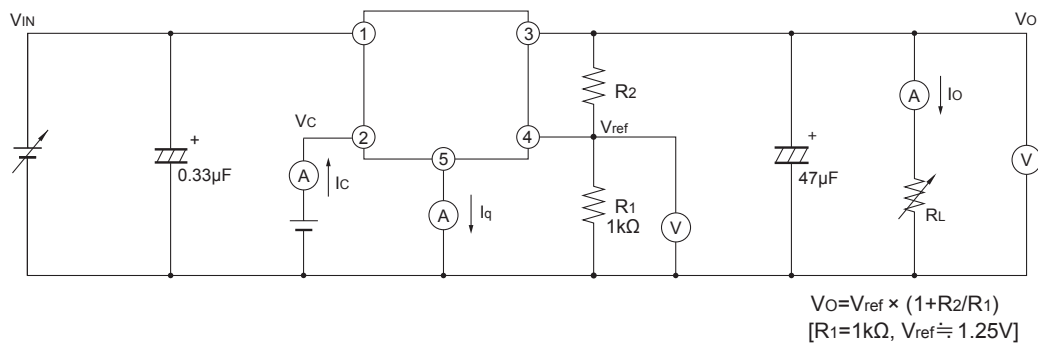


Fig.2 Test Circuit for Ripple Rejection

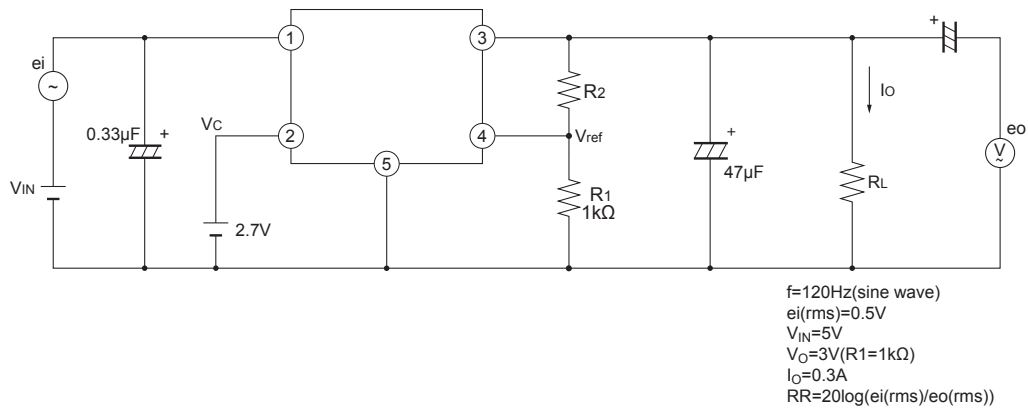
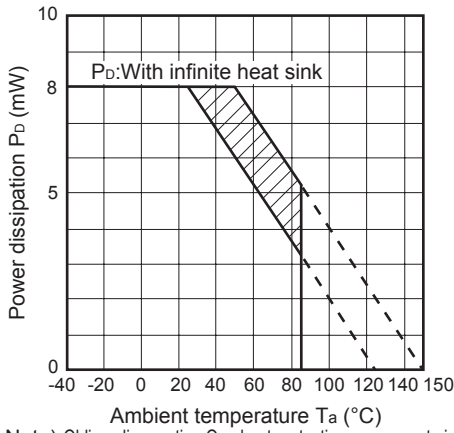


Fig.3 Power Dissipation vs. Ambient Temperature



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

Fig.4 Overcurrent Protection Characteristics

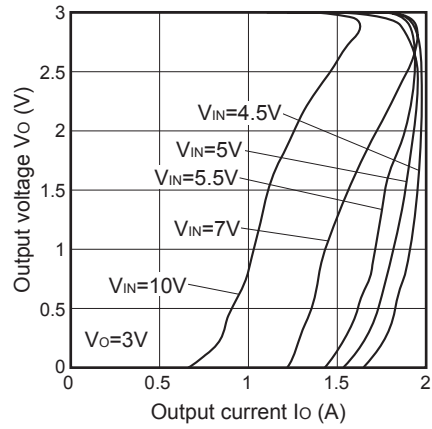


Fig.5 Reference Voltage vs. Ambient Temperature

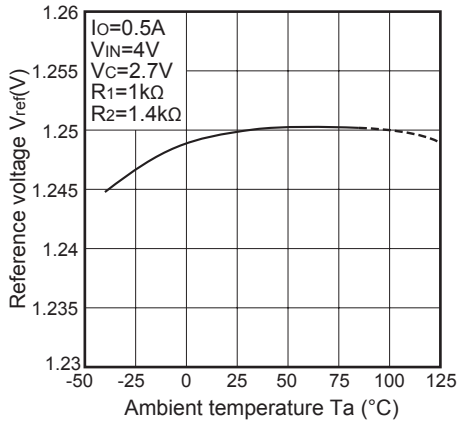


Fig.6 Output Voltage vs. Input Voltage

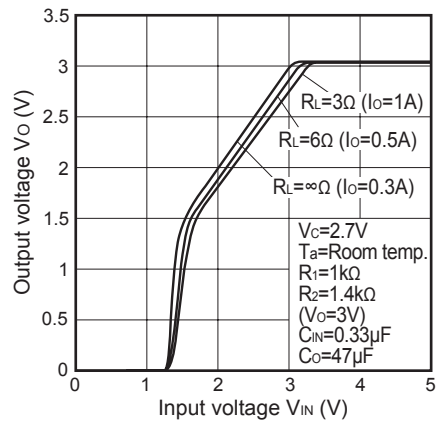


Fig.7 Circuit Operating Current vs. Input Voltage

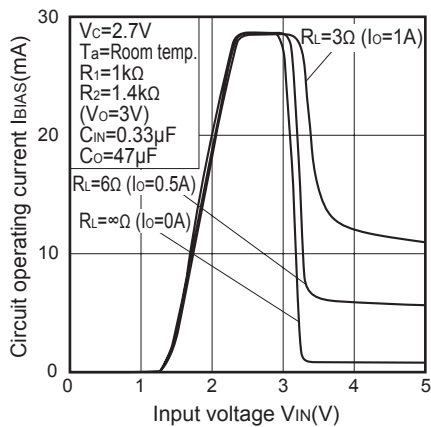


Fig.8 Dropout Voltage vs. Ambient Temperature

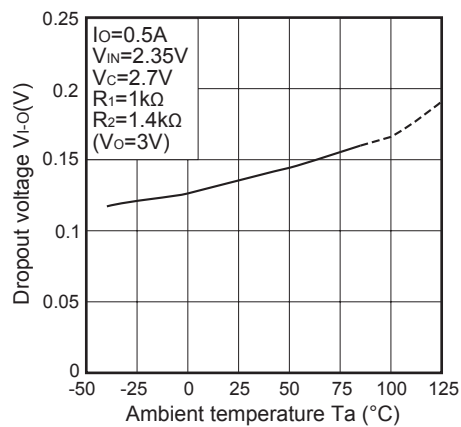


Fig.9 Quiescent Current vs. Ambient Temperature

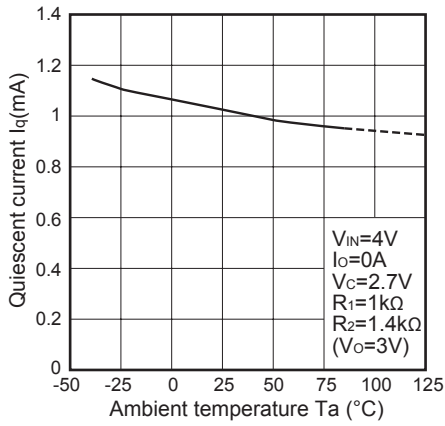


Fig.10 Ripple Rejection vs. Input Ripple Frequency

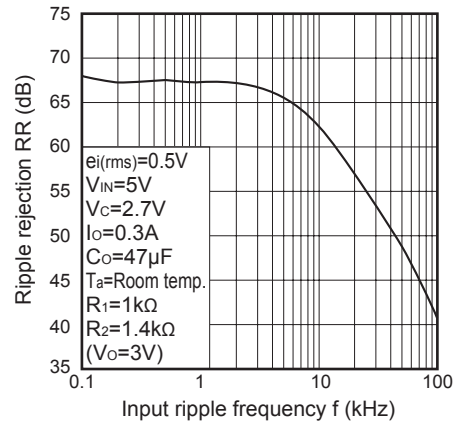


Fig.11 Ripple Rejection vs. Output Current

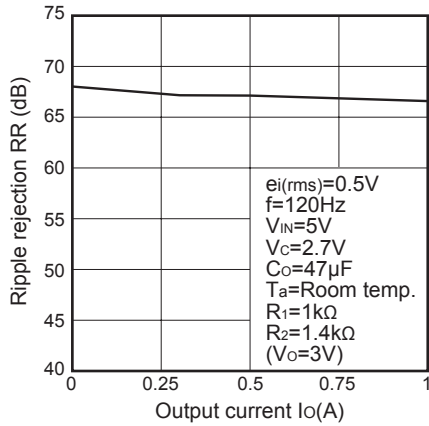
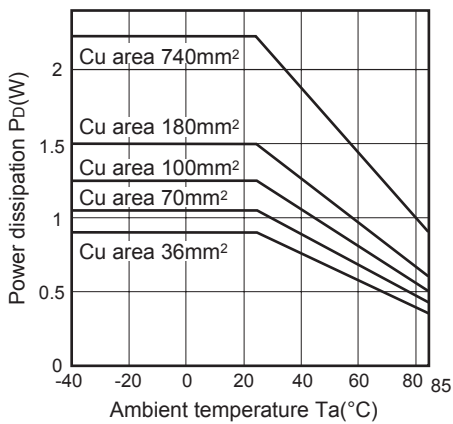
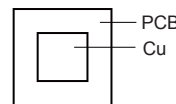


Fig.12 Power Dissipation vs. Ambient Temperature (Typical Value)

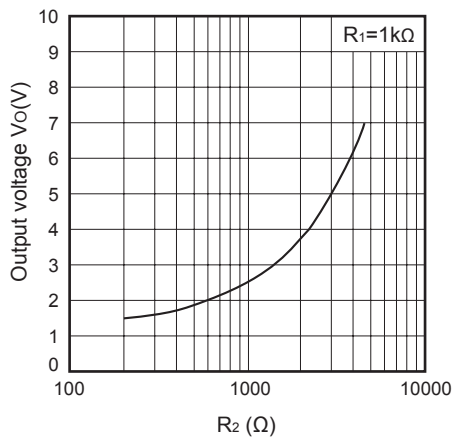


Mounting PCB

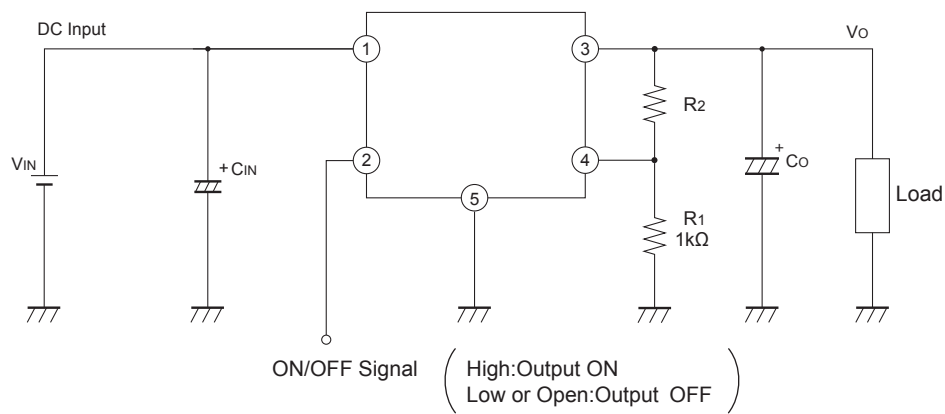


Material : Glass-cloth epoxy resin  
 Size : 50×50×1.6mm  
 Cu thickness : 35μm

Fig.13 Output Voltage Adjustment Characteristics



■ Typical Application



■ Setting of Output Voltage

Output voltage is able to set from 1.5V to 7V when resistors R<sub>1</sub> and R<sub>2</sub> are attached to ③,④,⑤ terminals. As for the external resistors to set output voltage, refer to the figure below and Fig.13.

