



**Electrical Characteristics**

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

Parameter	Symbol	Conditions	MIN.	TYP.	MAX.	Unit
Input voltage	$V_{IN}$	—	Refer to below table			V
Output voltage	$V_O$	—	Refer to below table			V
Load regulation	$R_{egL}$	$I_O=5mA$ to 1A	—	0.2	2.0	%
Line regulation	$R_{egI}$	$V_{IN}=V_O(TYP)+1V$ to $V_O(TYP)+6V$ , $I_O=5mA$	—	0.1	1.0	%
Temperature coefficient of output voltage	$T_cV_O$	$T_j=0$ to $125^\circ C$ , $I_O=5mA$	—	$\pm 0.01$	—	%/ $^\circ C$
Ripple rejection	RR	Refer to Fig.2	45	60	—	dB
ON-state voltage for control	$V_{C(ON)}$	—	2	—	—	V
ON-state current for control	$I_{C(ON)}$	—	—	—	200	$\mu A$
OFF-state voltage for control	$V_{C(OFF)}$	—	—	—	0.8	V
OFF-state current for control	$I_{C(OFF)}$	$V_C=0.4V$	—	—	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

**Input Voltage Line-up**

Model No.	Symbol	Conditions	MIN.	TYP.	MAX.	Unit
PQ015EH01Z	$V_{IN}$	$I_O=0.5A$ , $V_C=2.7V$ , $T_a=25^\circ C$	2.35	—	10	V
PQ018EH01Z	$V_{IN}$		2.35	—	10	V
PQ025EH01Z	$V_{IN}$		3	—	10	V

**Output Voltage Line-up**

Model No.	Symbol	Conditions	MIN.	TYP.	MAX.	Unit
PQ015EH01Z	$V_O$	$V_{IN}=V_O(TYP)+1V$ , $I_O=0.5A$ , $V_C=2.7A$ , $T_a=25^\circ C$	1.45	1.5	1.55	V
PQ018EH01Z	$V_O$		1.75	1.8	1.85	V
PQ025EH01Z	$V_O$		2.438	2.5	2.562	V

Fig.1 Test Circuit

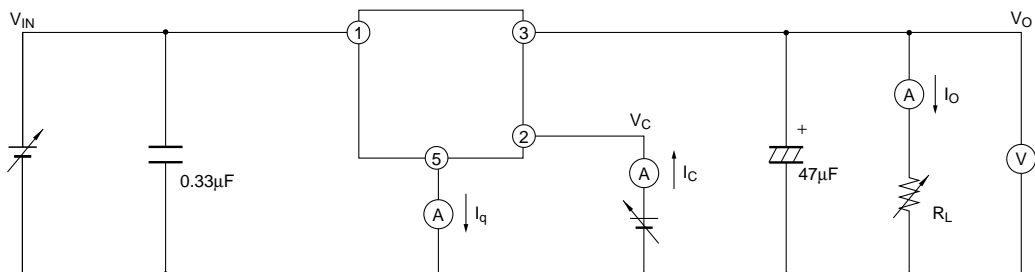


Fig.2 Test Circuit for Ripple Rejection

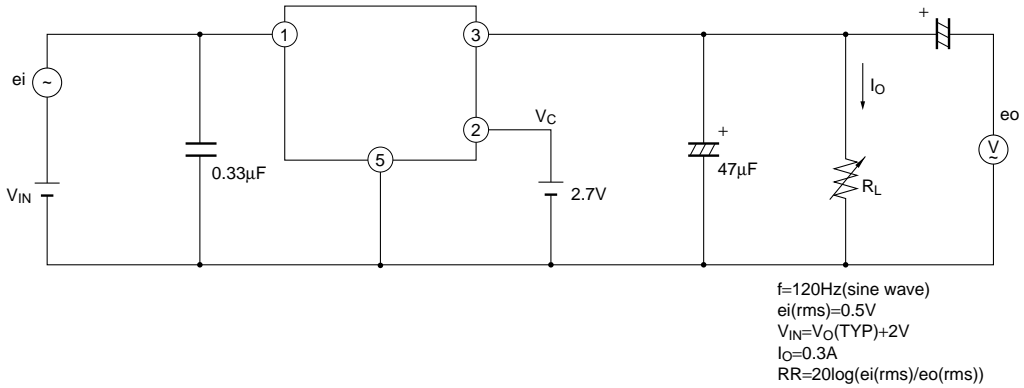
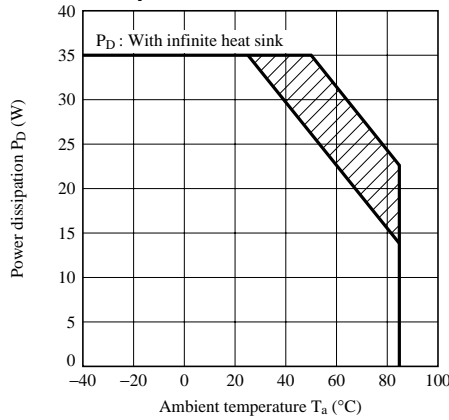


Fig.3 Power Dissipation vs. Ambient Temperature



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

Fig.4 Overcurrent Protection Characteristics (Typical Value, PQ015EH01Z)

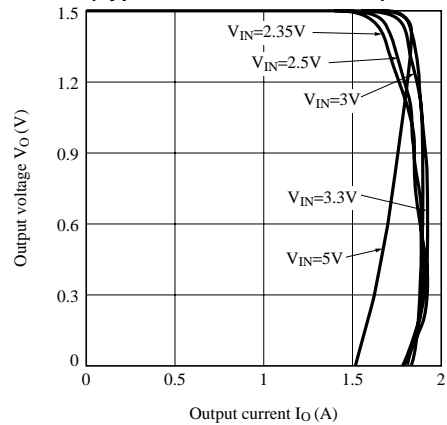


Fig.5 Overcurrent Protection Characteristics (Typical Value, PQ018EH01Z)

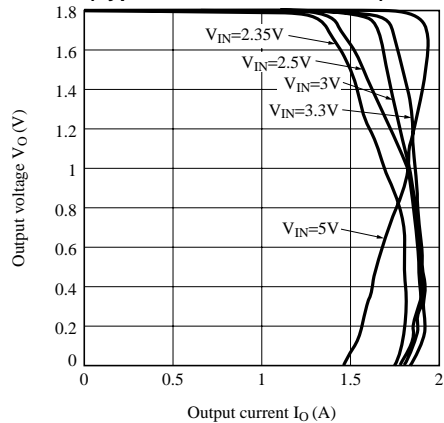
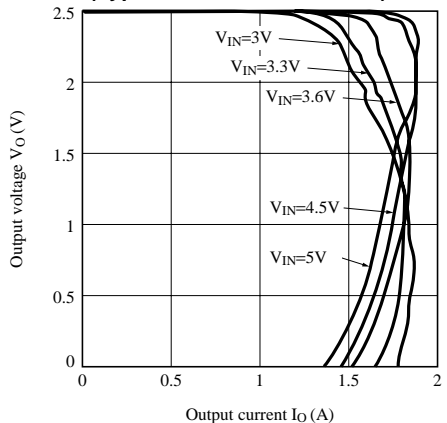
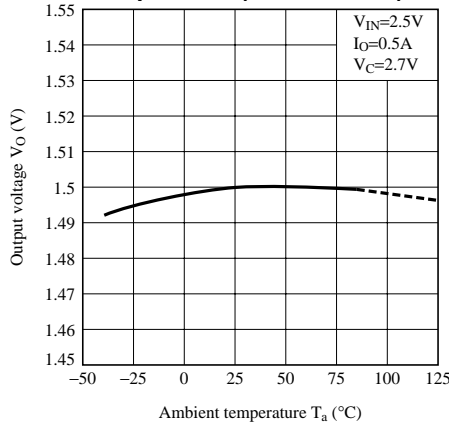


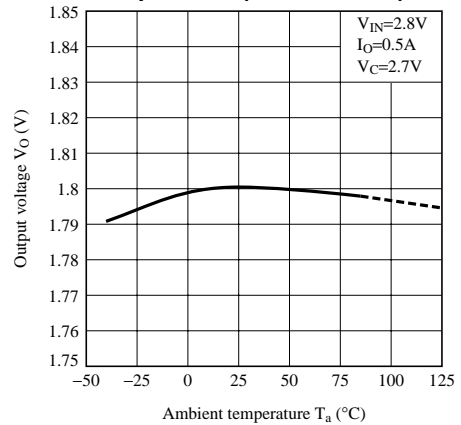
Fig.6 Overcurrent Protection Characteristics (Typical Value, PQ025EH01Z)



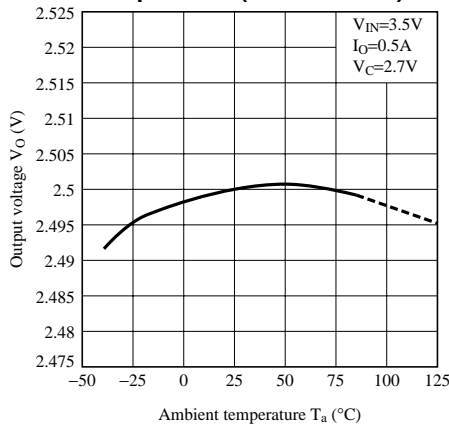
**Fig.7 Output Voltage vs. Ambient Temperature (PQ015EH01Z)**



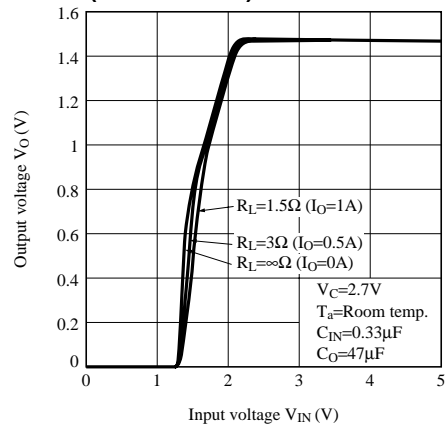
**Fig.8 Output Voltage vs. Ambient Temperature (PQ018EH01Z)**



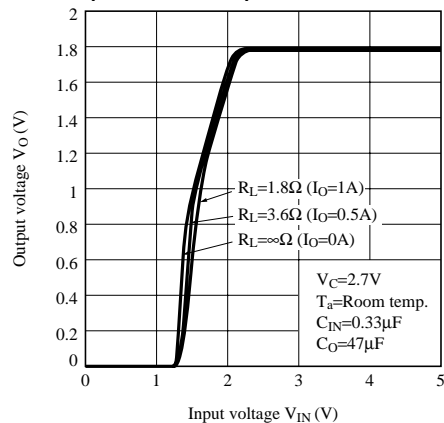
**Fig.9 Output Voltage vs. Ambient Temperature (PQ025EH01Z)**



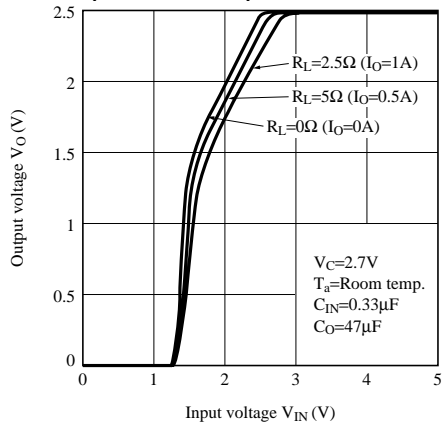
**Fig.10 Output Voltage vs. Input Voltage (PQ015EH01Z)**



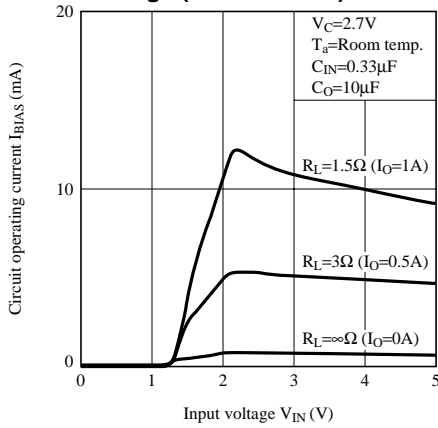
**Fig.11 Output Voltage vs. Input Voltage (PQ018EH01Z)**



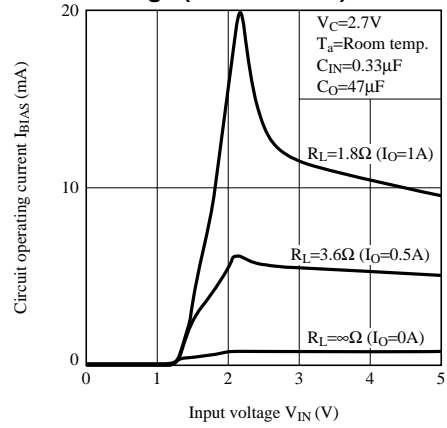
**Fig.12 Output Voltage vs. Input Voltage (PQ025EH01Z)**



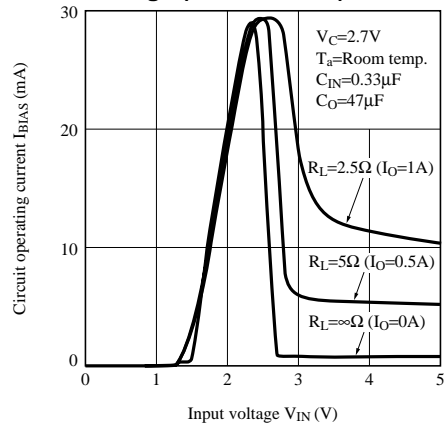
**Fig.13 Circuit Operating Current vs. Input Voltage (PQ015EH01Z)**



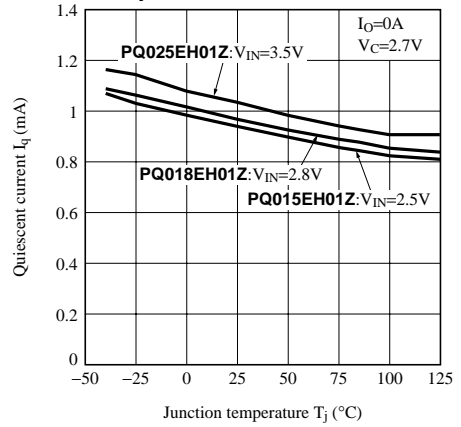
**Fig.14 Circuit Operating Current vs. Input Voltage (PQ018EH01Z)**



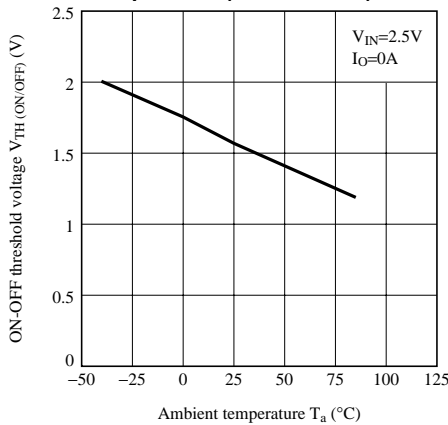
**Fig.15 Circuit Operating Current vs. Input Voltage (PQ025EH01Z)**



**Fig.16 Quiescent Current vs. Junction Temperature**



**Fig.17 ON-OFF Threshold Voltage vs. Ambient Temperature (PQ018EH01Z)**



**Fig.18 Ripple Rejection vs. Input Ripple Frequency**

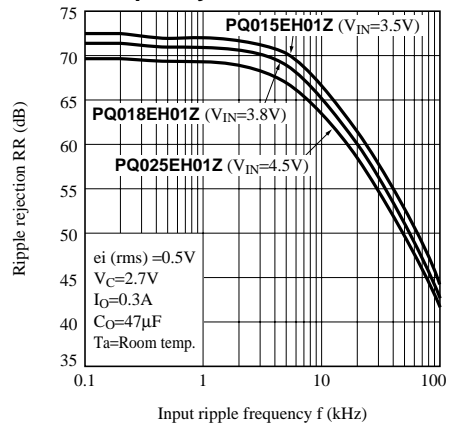


Fig.19 Ripple Rejection vs. Output Current

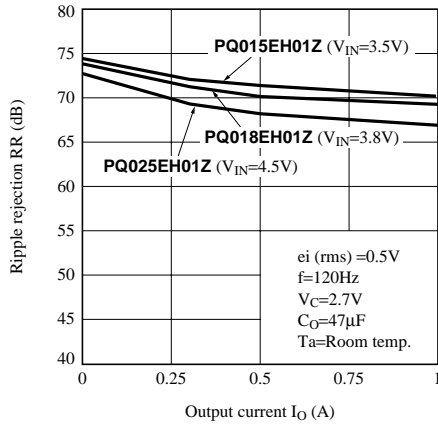
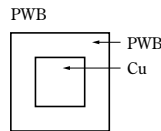
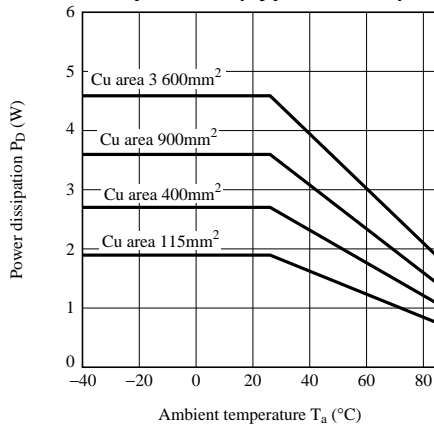
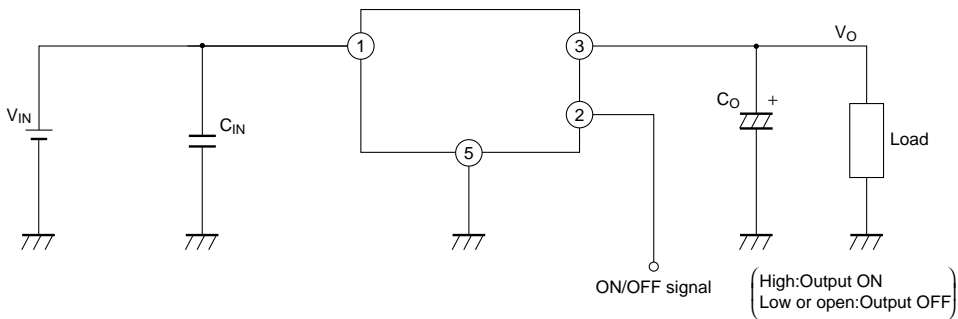


Fig.20 Power Dissipation vs. Ambient Temperature (Typical Value)



Material : Glass-cloth epoxy resin  
 Size : 60x60x1.6mm  
 Cu thickness : 65µm

Fig.21 Typical Application



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