

# PQ15RF15/PQ15RF16

1A Output, Low Power-Loss Voltage Regulators Considering Power Line Voltage Drop

## ■ Features

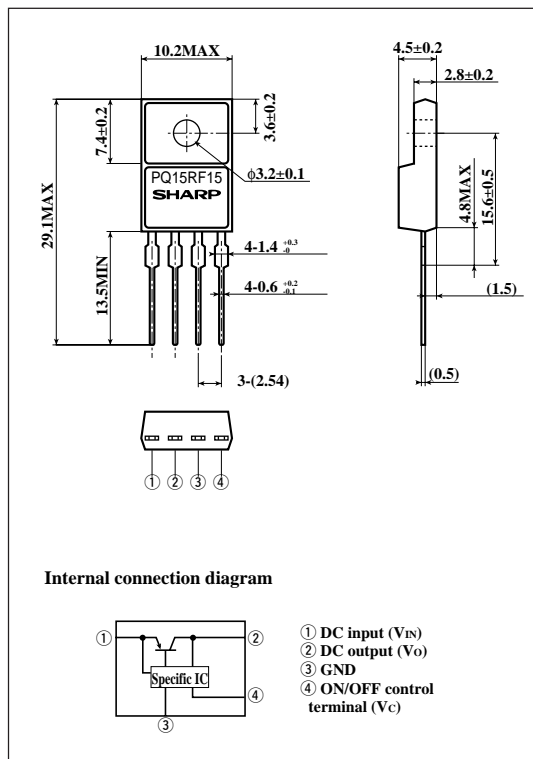
- Low power-loss (Dropout voltage : MAX. 0.5V)
- Compact resin full-mold package
- Conforming to the unified standard for BS converter
- Output voltage value (15.7V) with an allowance for voltage loss caused by reverse flow preventing diode
- Built-in ON/OFF control terminal corresponding to BS antenna power supply selecting switch
- High-precision output type (**PQ15RF16**) (Output voltage precision :  $\pm 2.5\%$ )

## ■ Applications

- TVs and VCRs with built-in BS tuners
- BS tuners

## ■ Outline Dimensions

(Unit : mm)



## ■ Absolute Maximum Ratings

( $T_a=25^\circ\text{C}$ )

Parameter	Symbol	Rating	Unit
*1 Input voltage	$V_{IN}$	35	V
*1 ON/OFF control terminal voltage	$V_C$	35	V
Output current	$I_O$	1	A
Power dissipation (No heat sink)	$P_{D1}$	1.5	W
Power dissipation (With infinite heat sink)	$P_{D2}$	15	
*2 Junction temperature	$T_j$	150	$^\circ\text{C}$
Operating temperature	$T_{opr}$	-20 to +80	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-40 to +150	$^\circ\text{C}$
Soldering temperature	$T_{sol}$	260 (For 10s)	$^\circ\text{C}$

\*1 All are open except GND and applicable terminals.

\*2 Overheat protection may operate at  $125 < T_j < 150^\circ\text{C}$

· Please refer to the chapter "Handling Precautions".

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Fig.5 Output Voltage Deviation vs. Junction Temperature

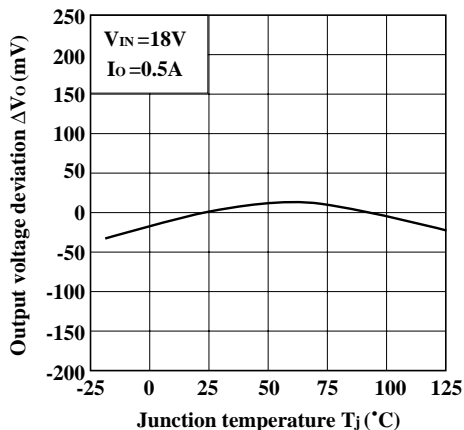


Fig.6 Output Voltage vs. Input Voltage

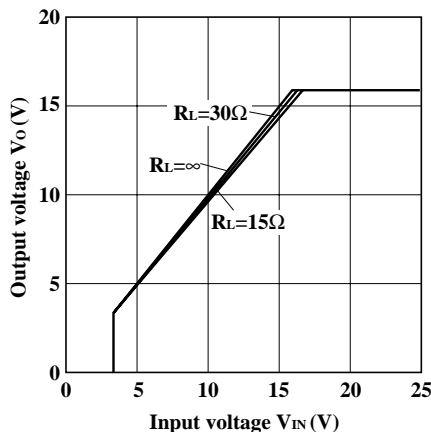


Fig.7 Circuit Operating Current vs. Input Voltage

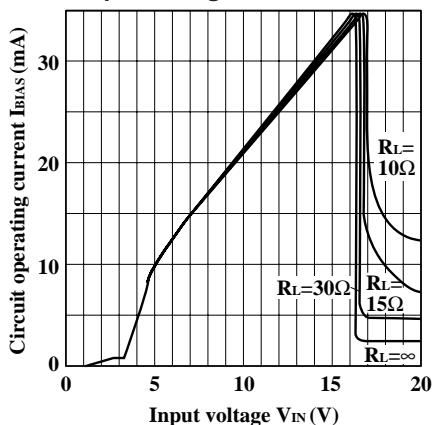


Fig.8 Dropout Voltage vs. Junction Temperature

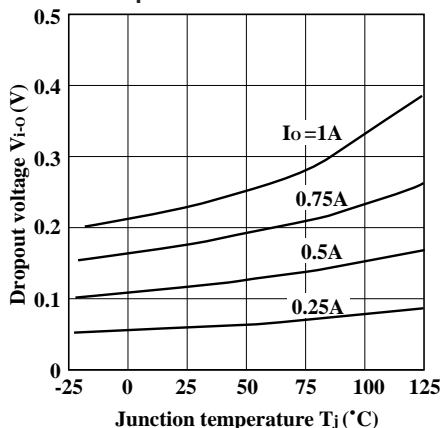


Fig.9 Quiescent Current vs. Junction Temperature

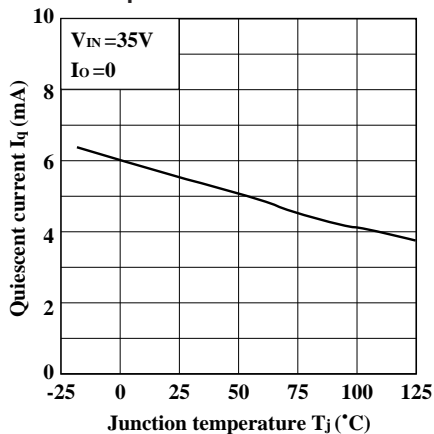


Fig.10 Ripple Rejection vs. Input Ripple Frequency

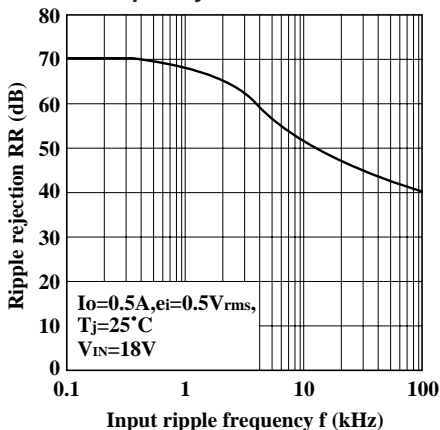


Fig.11 Ripple Rejection vs. Output Current

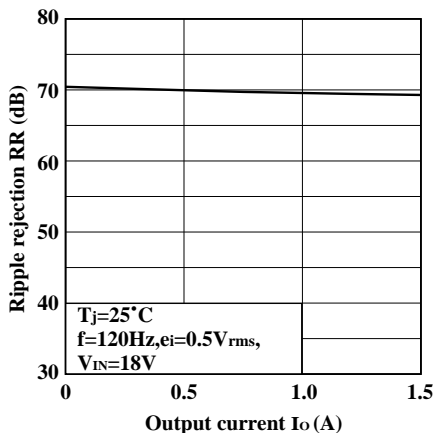
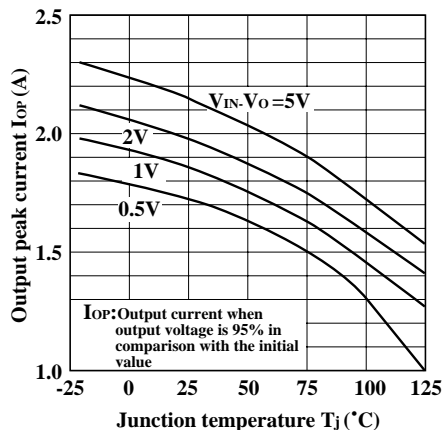


Fig.12 Output Peak Current vs. Junction Temperature

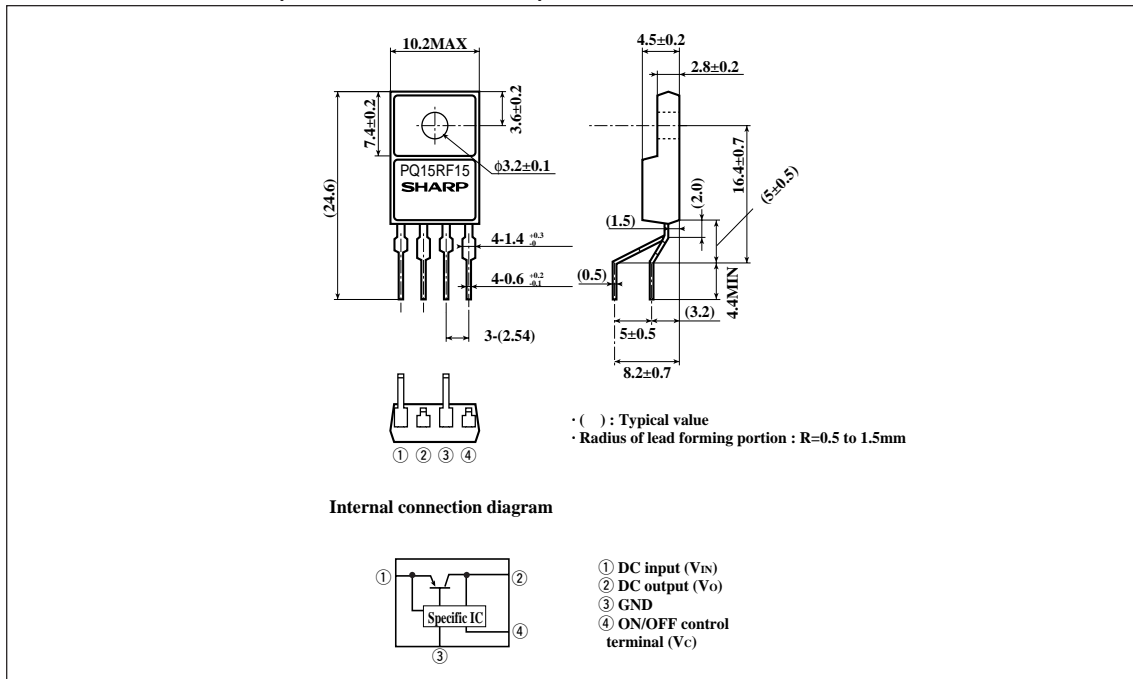


Model Line-ups for Lead Forming Type

Output voltage	15.7V output
Output voltage precision:±5%	PQ15RF1F
Output voltage precision:±2.5%	PQ15RF1G

Outline Dimensions (PQ15RF1F/PQ15RF1G)

(Unit : mm)



Note) The value of absolute maximum ratings and electrical characteristics is same as ones of PQ15RF15/16 series.

This datasheet has been download from:

[www.datasheetcatalog.com](http://www.datasheetcatalog.com)

Datasheets for electronics components.