SHARP

NEW PRODUCT **Low Power-Loss Voltage Regulator**

Model PQ2Lxxx2MSP

Issued on Jan. 25, 2002
Sales & Marketing Group
-Electronic Components & Devices

Low Current, Dual Output Type, Low Power-Loss Voltage Regulator

Features

- Dual output type with high heat radiation package SOT-89
  Power dissipation: 0.9 W
- Dual outputs, 250 mA on each channel
  Output 1: 3.3 V/2.5 V, 250 mA
  Output 2:1.3 - 3.3 V(Increments of 0.1 V), 250 mA
- Ceramic capacitors can be used for output smoothing
- Reduced package area
  (Compared to two conventional PQ1Kxx3M2Z packages: 14 % reduction)

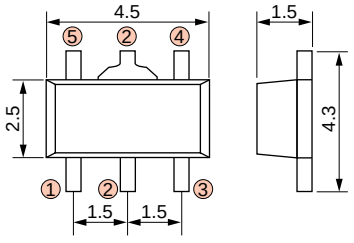
Applications

- Cellular phone
- PDA
- Digital TV
- Set-top box
- DVD players
- Optical disc device
- Digital still camera
- Printer

Specifications

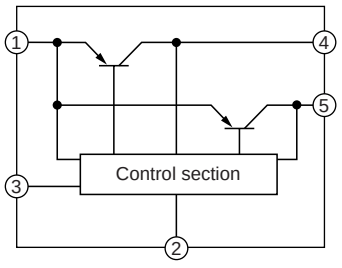
Parameter	Symbol	Characteristics	
		Output 1	Output 2
Voltage input	Vin	MAX. 9 V	
Output current	Io	MIN. 250 mA	MIN. 250 mA
Power dissipation	Pd	900 mW	
Output voltage	Vo	3.3/2.5 V	2.5 V/1.8 V
Dropout voltage	Vi-o	MAX. 0.4 V (Io=100 mA)	
Dissipation current	Iq	MAX. 400 µA	
Operating temperature	Topr	−30 to +80 °C	

Outline Dimensions (Unit: mm)



Terminal configuration
① Vin
② GND
③ Nr
④ V_{O2}
⑤ V_{O1}

Internal Configuration Diagram



Line-up of Low Current Output Regulators

Output current	Package			Fixed output type
1-output 150 mA	TO-92	Bipolar type	General-purpose type	PQ033ES1MWP PQ050ES1MWP
180 mA	SOT-23L	Bipolar type	General-purpose type	PQ1R30 series
	SOT-23-5	Bipolar type	General-purpose type	PQ1U301M2ZP series
			Low oscillation type	PQ1X301M2ZP series
200 mA	SOT-23-5	CMOS type	General-purpose type	PQ1T301M2ZP series
300 mA	SOT-23L	Bipolar type	General-purpose type	PQ1K303M2ZP series
	SOT-89	Bipolar type	General-purpose type	PQ1L303M2SP series
2-output 250 mA	SOT-89	Bipolar type	General-purpose type	PQ2Lxxx2MSP series

New product