

PQ1PF3/PQ2PF3 Primary Regulator for Switching Power Supply

FEATURES

- Five-terminal lead forming package (equivalent to TO-220)
- Built-in oscillation circuit (oscillation frequency: 100 kHz)
- Improved efficiency at low load, switching the oscillation frequency by external control signal
- Output for power supply 10 W class
- Built-in overheat protection, overcurrent protection, low voltage malfunction prevention function

DESCRIPTION

SHARP's PQ1PF3/PQ2PF3 are primary regulators for switching power supply. It reduces parts count and power loss of the switching section, by integrating a power MOS-FET and control IC into a single chip.

ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	RATING		UNIT
		PQ1PF3	PQ2PF3	
Drain-GND (source) voltage	V_{DS}	50V	80V	
Drain current	I_D	200mA	2A	
Power supply voltage ¹	V_{CC}	35V		
FB terminal input voltage ²	V_{FB}	4V		
CA terminal input current	I_{CA}	2A		mA
Power dissipation ³	P_{D1}	1W		
	P_{D2}	18W		
Junction temperature ⁴	T_J	150°C		°C
Operating temperature	T_{OP}	-20 to +85		°C
Storage temperature	T_{STG}	-40 to +150		°C
Soldering temperature	T_{SP}	260 (for 10s)		°C

NOTES:

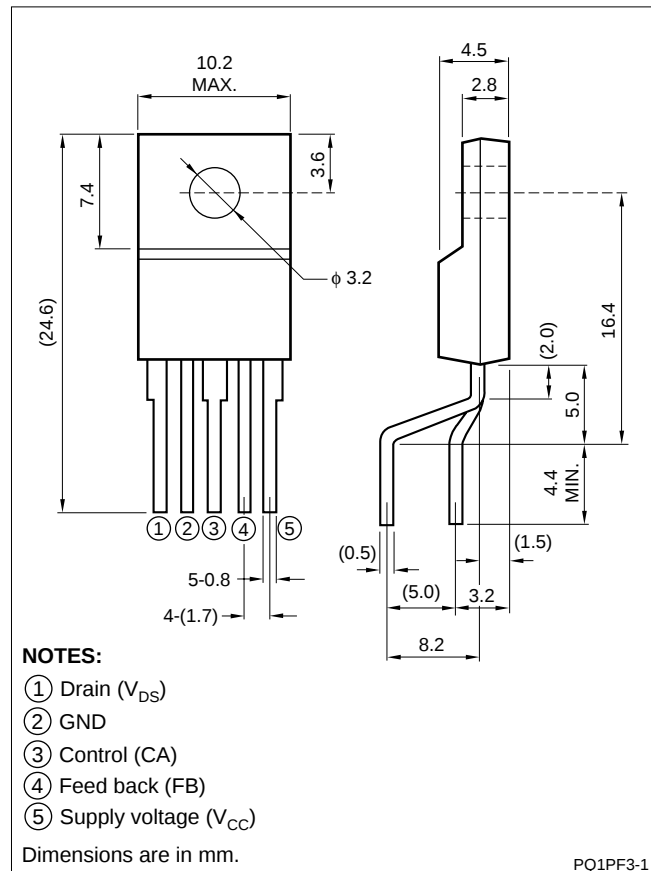
1. Voltage between V_{CC} terminal and GND terminal
2. Voltage between FB terminal and GND terminal
3. P_{D1} : No heat sink, P_{D2} : With infinite heat sink
4. Overheat protection may operate at $T_J = 125^\circ\text{C}$ to 150°C
5. $T_A = 25^\circ\text{C}$

The information for this document is from the Tec. PW970501, issued in 1997.

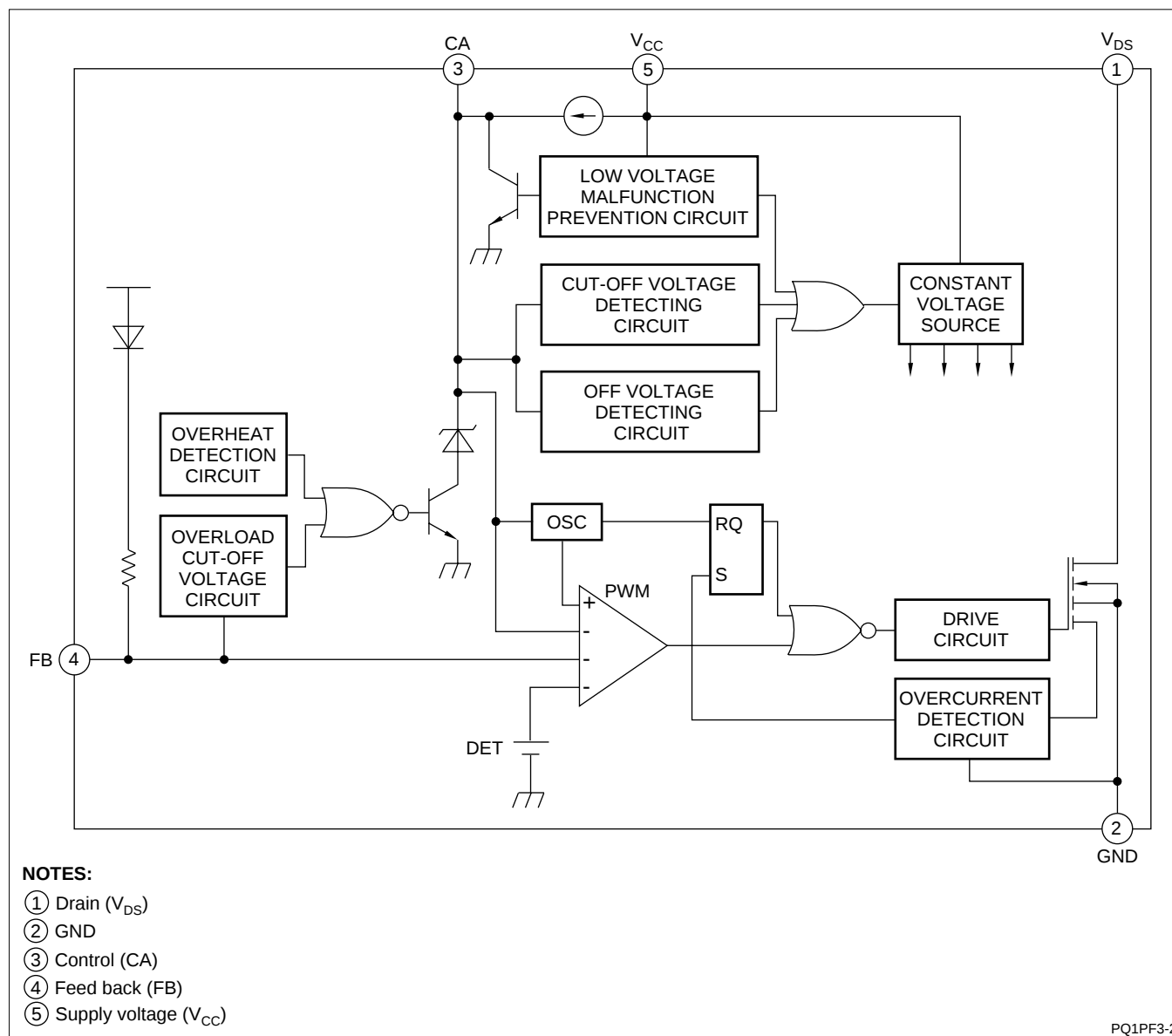
APPLICATIONS:

DVD
Notebook PC
Set Top Box
POS

OUTLINE DIMENSIONS



INTERNAL CONNECTION



APPLICATION CIRCUIT (SWITCHING POWER SUPPLY)

