

PSR SERIES PSR1-78xxLF

WIDE INPUT REGULATED SINGLE OUTPUT SIP3 – 1000mA

Wide Input Range

Efficiency up to 93%

Available Outputs:

3.3, 5, 6.5, 9, 12 VDC

Other specifications please enquire.

Electrical Specifications

(Typical at + 25° C, nominal input voltage, rated output current unless otherwise specified)

Output Specifications

Voltage accuracy (at 100% load)	+/- 2 %, typ. / +/- 3%, max.
Line voltage regulation (Vin=min. to max. at full load)	+/- 0,2%, typ. / +/- 0.4%, max.
Load voltage regulation (10% - 100%)	+/- 0.4%, typ. / 0.6%, max.
Ripple and noise (at 20 MHz BW)	20 mV p-p, typ. / 35 mV p-p, max.
Short circuit input power	0.5W, typ. / 1.2W, max.
Short circuit protection	Continuous, automatic recovery
Output current limit	2000mA, max.
Switching frequency	280KHz, min. / 330 KHz, typ. / 450 KHz, max.
Dynamic load stability 100% <-> 10% load	+/- 100mV
Quiescent current (Vin=min. to max. at 0% load)	5mA, typ. / 7mA, max.
Thermal shutdown (Internal IC junction)	150 °C, typ.
Temperature coefficient (-40 °C – 85 °C ambient)	0.02% °C, max.

Common Specifications

Operating temperature (ambient)	- 40 °C to + 85 °C / 100 °C case max.
Storage temperature	- 55 °C to + 125 °C
Cooling	Free air convection
MTBF (MIL-HDBK-217F)	2000 KHrs, min.

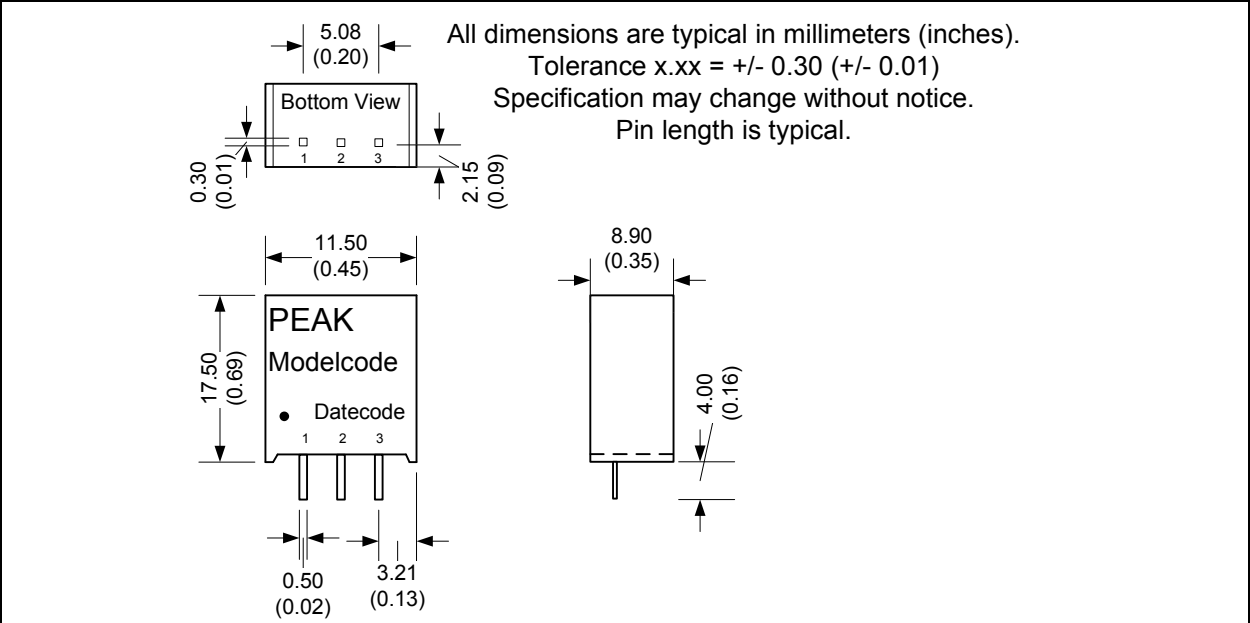
Physical Characteristics

Case material	Plastic (UL94-V0)
“RoHS compliant”	Soldering 260 °C / max. 10 sec.

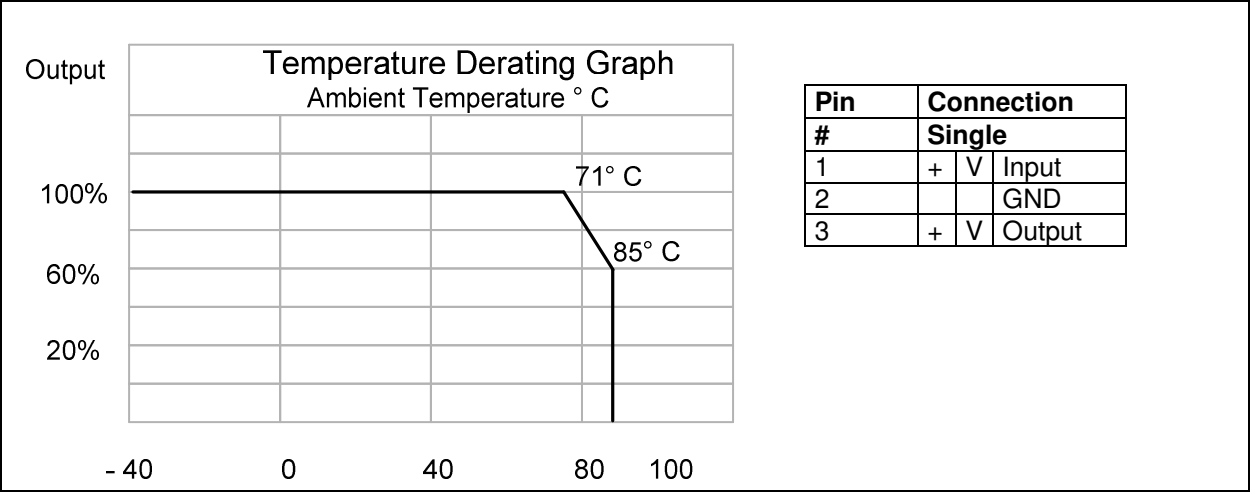
Examples for Partnumbers

PART NO.	INPUT VOLTAGE (VDC)	OUTPUT VOLTAGE (VDC)	OUTPUT CURRENT (max. mA)	EFFICIENCY Min Vin (%)	EFFICIENCY Max Vin (%)
PSR1-783R3LF	4.75 – 28	3.3	1000	90	83
PSR1-7805LF	6.5 – 32	5	1000	93	88
PSR1-786R5LF	9.0 - 32	6.5	1000	94	90
PSR1-7809LF	12 - 32	9	1000	95	92
PSR1-7812LF	16 – 32	12	1000	96	94

Dimensions

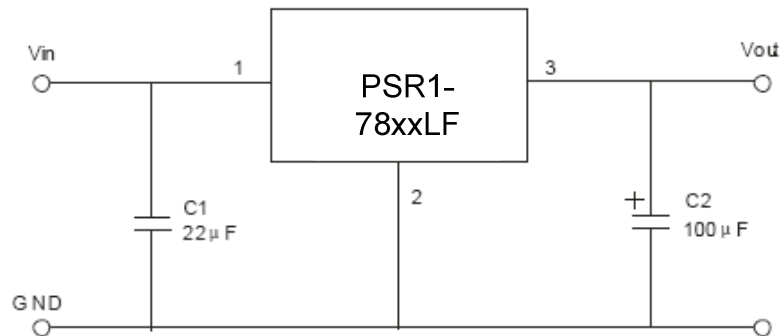


Derating Graph and Pinning



App Notes :

STANDARD APPLICATION CIRCUIT TOP VIEW



NOTE:

C1: a low ESR capacitor is required to keep the noise at the converter to a minimum. Ceramic capacitors are preferred, but tantalum or low ESR electrolytic capacitors may also be used. Use 22 μ F/50V ceramic capacitor.

C2: Optional use 100 μ F/25V electrolytic capacitor.

Note: No parallel connection or plug and play.

Specification can be changed without notice.

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