P8GG-xxxxE(Hxx)LF

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PMF-SERIES Rev.02-2009

- ✓ 1.5 Watt
- ✓ Regulated
- ✓ **Single** Output
- ✓ **SIP 12** Case
- ✓ **1 kV** up to **5.2kV** DC I/O Isolation
- ✓ Cont. Short Circuit Protection

The PMF series P8GG-xxxxE(Hxx)LF is a family of cost effective 1.5 W regulated single output DC/DC converters. These converters are in an ultra miniature SIP12 case. Devices are encapsulated. High performance features: Regulated Output, 1000VDC up to 5200VDC input/output isolation, high efficiency operation, output voltage accuracy of ±2% maximum and input range of ±10% tolerance.

All specifications typical at Ta=25℃, nominal input voltage and full load unless otherwise specified

Input Specifications	
Voltage Range	± 10%
Input Filter	Capacitors
Input Reflected Ripple Current[1]	20 mA pk-pk
Output Specifications	
Voltage Accuracy	± 2%
Short Circuit Protection	Indefinite (Automatic Recovery)
Line Regulation	± 0.5%
Load Regulation (0% - 100%)	± 0.5% (3.3Vout Models: ± 1.5%)
Ripple and Noise (20Mhz bandwidth)	75 mV pk-pk
Temperature Coefficient	± 0.02% / ℃
General Specifications	
Efficiency	See Table
I/O Isolation Voltage (3 sec.)	1000 VDC (up to 5200 VDC optional*)
I/O Isolation Capacity	60 pF, typ.
I/O Isolation Resistance	1000 M Ohm
Switching Frequency	50 kHz (typ.)
Humidity	95% rel H
Reliability Calculated MTBF (MIL-HDBK-217F)	> 1.12 Mhrs
Physical Specifications	
Case Material	Non Conductive Black Plastic (UL94V-0 rated)
Potting Material	Epoxy (UL94V-0 rated)
Weight	~ 7.2g, typ.
Environment Specifications	
Operating Temperature	-25 to +71℃ (ambient)
Maximum Case Temperature	100℃
Storage Temperature	-40 to +125℃
Cooling	Free Air Convection
RoHS Conform	Soldering 260℃, max. (1.5mm from case 10s.)

Selection Guide
Single Output

Order #	Input Voltage (VDC)	Input Current No Load (mA)	Input Current Full Load (mA)	Output Voltage (VDC)	Output Current Full Load (mA)	Efficiency (%)	Capacitor Load (uF)[2]
SINGLE OUTPUT							
P8GG-053R3ELF	5	70	432	3.3	400	61	220
P8GG-0505ELF	5	70	454	5	300	66	220
P8GG-057R2ELF	5	70	454	7.2	208.3	66	220
P8GG-0509ELF	5	90	454	9	166.6	66	220
P8GG-0512ELF	5	90	447	12	125	67	220
P8GG-0515ELF	5	90	447	15	100	67	220
P8GG-0518ELF	5	90	447	18	83.3	67	220
P8GG-0524ELF	5	130	441	24	62.5	68	220
P8GG-123R3ELF	12	50	180	3.3	400	61	220
P8GG-1205ELF	12	50	189	5	300	66	220
P8GG-127R2ELF	12	50	186	7.2	208.3	67	220
P8GG-1209ELF	12	50	186	9	166.6	67	220
P8GG-1212ELF	12	50	186	12	125	67	220
P8GG-1215ELF	12	50	183	15	100	68	220
P8GG-1218ELF	12	50	183	18	83.3	68	220
P8GG-1224ELF	12	50	183	24	62.5	68	220
P8GG-243R3ELF	24	25	88	3.3	400	62	220
P8GG-2405ELF	24	25	96	5	300	65	220
P8GG-247R2ELF	24	25	96	7.2	208.3	65	220
P8GG-2409ELF	24	25	96	9	166.6	65	220
P8GG-2412ELF	24	25	93	12	125	67	220
P8GG-2415ELF	24	25	93	15	100	67	220
P8GG-2418ELF	24	25	93	18	83.3	67	220
P8GG-2424ELF	24	25	91	24	62.5	68	220

If you need other specifications, please enquire.

***OPTIONS:**

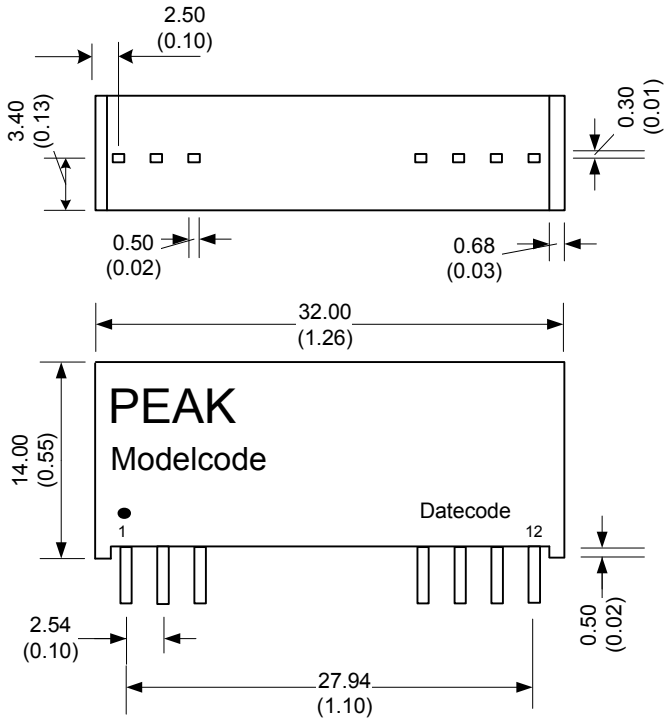
H30 = 3000 VDC ISOLATION

H52 = 5200 VDC ISOLATION

For other I/O Isolation please see table on the left hand side and add "**Hxx**" before LF (P8GG-2412E**H52**LF for **5.2kV)**

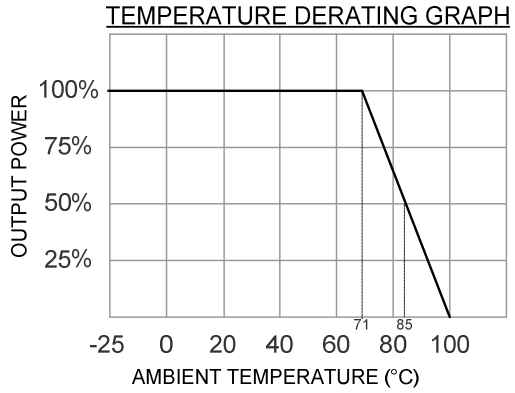
Notes:

Package / Pinning / Derating



All dimensions are typical in millimeters (inches).
- Pin diameter: 0.5 +/-0.05 (0.02 +/-0.002)
- Pin pitch tolerance: +/-0.35 (+/-0.014)
- Case tolerance +/-0.5 (+/-0.02)

Specification may change without notice.



PIN CONNECTIONS		
#	SINGLE	SINGLE **≥3kV**
1	+Vin	+Vin
2	N.C.	- Vin
3	N.C.	N.C.
9	N.C.	N.C.
10	- Vout	- Vout
11	+Vout	+Vout
12	- Vin	N.C.

App Notes:

[1] = Measured Input reflected ripple current with a simulated source inductance of 12uH.
[2] = Tested by minimal Vin and constant resistive load.