

# P6LG-xxxxZSLF



## PM2-SERIES

Rev.02-2009

- ✓ 1 Watt
- ✓ Regulated
- ✓ **Dual Split Output**
- ✓ **SIP7 Case**
- ✓ **3 kV DC I/O Isolation**
- ✓ Low Ripple and Noise

The PM2 series P6LG-xxxxZSLF is a family of cost effective 1 W regulated dual split output DC/DC converters. These converters are in an ultra miniature SIP7 case. Devices are encapsulated. High performance features: Regulated Output, 3000VDC input/output isolation, high efficiency operation, output voltage accuracy of  $\pm 2\%$  maximum, input range of  $\pm 10\%$  tolerance and low output ripple and noise.

All specifications typical at  $T_a=25^\circ\text{C}$ , nominal input voltage and full load unless otherwise specified

### Input Specifications

Voltage Range	$\pm 10\%$
Input Filter	Capacitors
Input Reflected Ripple Current <sup>1</sup>	20 mA pk-pk

### Output Specifications

Voltage Accuracy	$\pm 2\%$
Line Regulation	$\pm 0.4\%$
Load Regulation (0% - 100%)	$\pm 0.3\%$
Ripple and Noise (20Mhz bandwidth)	50 mV pk-pk
Temperature Coefficient	$\pm 0.02\% / ^\circ\text{C}$

### General Specifications

Efficiency	See Table
I/O Isolation Voltage (3 sec.)	3000 VDC
I/O Isolation Capacity	60 pF, typ.
I/O Isolation Resistance	1000 M Ohm
Switching Frequency	80 kHz (Variable)
Humidity	95% rel H
Reliability Calculated MTBF (MIL-HDBK-217F)	> 1.121 Mhrs

### Physical Specifications

Case Material	Non Conductive Black Plastic (UL94V-0 rated)
Potting Material	Epoxy (UL94V-0 rated)
Weight	~ 2.5g, typ.

### Environment Specifications

Operating Temperature	-25 to +71 $^\circ\text{C}$ (ambient)
Maximum Case Temperature	100 $^\circ\text{C}$
Storage Temperature	-40 to +125 $^\circ\text{C}$
Cooling	Free Air Convection (10 mm distance required)
RoHS Conform	Soldering 260 $^\circ\text{C}$ , max. (1.5 mm from case 10s.)

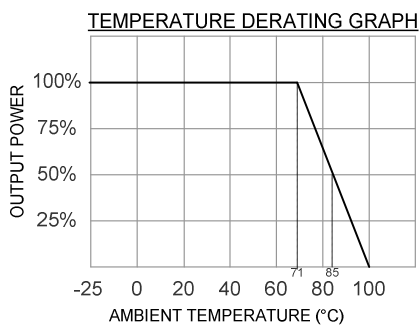
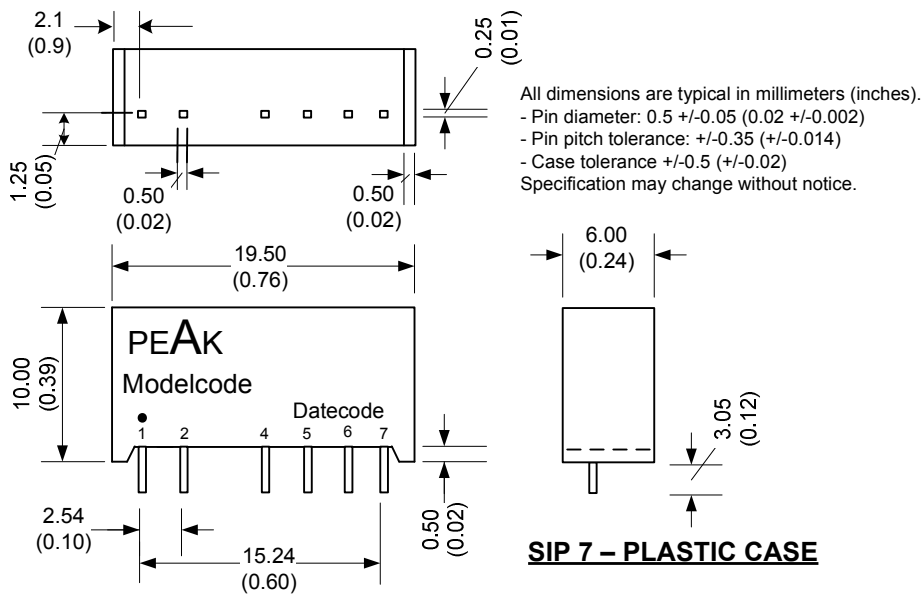
# Selection Guide

## Dual Split 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) <sup>2</sup>
<b>DUAL SPLIT OUTPUT</b>							
P6LG-0505ZSLF	5	28	307	5, 5	100, 100	65	100
P6LG-1205ZSLF	12	15	124	5, 5	100, 100	67	100
P6LG-1505ZSLF	15	12	99	5, 5	100, 100	67	100
P6LG-2405ZSLF	24	8	59	5, 5	100, 100	70	100

If you need other specifications, please enquire.

## Package / Pinning / Derating



PIN CONNECTIONS	
#	DUAL SPLIT (3KV)
1	+Vin
2	- Vin
4	Omitted
5	+V2 out
6	Ground
7	+V1 out

### App Notes:

<sup>1</sup> = Measured Input reflected ripple current with a simulated source inductance of 12uH.

<sup>2</sup> = Tested by minimal Vin and constant resistive load.

- Operation under no-load conditions will not damage these devices, but they will not observe the listed specifications.