

## PRODUCT SPECIFICATIONS FOR SM2412-25

**DESCRIPTION:** The SM2412-25 is a general purpose DC-DC converter, allowing operating voltage as low as 20VDC and as high as 60VDC input. at a regulated 13.8VDC output.

**PURPOSE:** Operating standard 12 volt DC equipment (lights, radios, computers, cell phones, and two way radio) from a non standard electrical system.

**FEATURES:**

- Switched Voltage Regulated
- High Efficiency
- 25A Continuous Current
- Current Limited
- Chaos Latching
- Short Circuit Protected
- Reverse Voltage Protected
- Thermal Protected
- Soft Start
- Over Voltage Protected
- Shielded Against Noise and RF Interference
- Input and Output Filtering
- High Voltage Pre-regulation
- Minimum and Maximum Voltage Lockouts

### ELECTRICAL CHARACTERISTICS

Parameters	Min	Max	Avg
Input Voltage Range	20VDC	60VDC	45VDC
Input Current No Load	100MA	200MA	150MA
Input Current Full Load	6A@60VDC	16A@25VDC	9A@45VDC
Output Voltage	13.6VDC	13.9VDC	13.8VDC
Output Current Full Load	24.0A	27.0A	25.5A
Load Regulation (.5-25A)	.015VDC	.200VDC	.100VDC
Output Ripple (25A Load)	.010VDC	.030VDC	.020VDC
Switching Frequency	50 KHZ	60 KHZ	55 KHZ
Efficiency (1-25A Load)	80%	92%	85%
Case Temperature at Shut Down	150 F	170 F	160 F
Max Operating Voltage Range (Logical Lockouts)	less that 20VDC	80VDC	
Max Input Spike Durations	200VDC for 1 MIN – 400VDC for 1MS		
Weight:	5.96 lbs. (97 oz)		