

GLOBAL INDUSTRIAL PRODUCTS 800-951-8774 FAX: 847-901-4036
PRODUCT SPECIFICATIONS FOR C510
SM2412-2.5

DESCRIPTION: THE SM2412-2.5 IS A GENERAL PURPOSE DC-DC CONVERTER, ALLOWING OPERATING VOLTAGES AS LOW AS 18VDC AND AS HIGH AS 50VDC INPUT AT A REGULATED 13.8VDC OUTPUT.

PURPOSE: OPERATING STANDARD 12 VOLT DC EQUIPMENT (LIGHTS, RADIOS, CELL PHONES, AND COMPUTER EQUIPMENT) FROM A NON STANDARD ELECTRICAL SYSTEM.

FEATURES:

- SWITCHED VOLTAGE REGULATED
- HIGH EFFICIENCY
- 2.5A CONTINUOUS OUTPUT CURRENT
- CURRENT LIMITED
- SHORT CIRCUIT PROTECTED
- THERMAL PROTECTED
- SOFT START (FOR STARTING INDUCTIVE LOADS)
- REVERSE VOLTAGE PROTECTED
- OVER VOLTAGE PROTECTED
- SHIELDED AGAINST NOISE AND RF INTERFERENCE
- INPUT AND OUTPUT FILTERING

ELECTRICAL CHARACTERISTICS

PARAMETER'S	MIN	MAX	AVG
INPUT VOLTAGE RANGE	18VDC	55VDC	24VDC
INPUT CURRENT NO LOAD	20MA	80MA	40MA
INPUT CURRENT FULL LOAD	.75A @50VDC	2.35A @18VDC	1.75A @24VDC
OUTPUT VOLTAGE	13.7VDC	13.9VDC	13.8VDC
OUTPUT CURRENT NO LOAD	15MA	30MA	20MA
OUTPUT CURRENT FULL LOAD	2.5.0A	3.5.0A	3.0A
LINE REGULATION (18-50VDC)	.005VDC	.015VDC	.01VDC
LOAD REGULATION (.5-2.5A)	.015VDC	.250VDC	.100VDC
OUTPUT RIPPLE (2.5A LOAD)	.025VDC	.055VDC	.04VDC
SWITCHING FREQUENCY	95KHZ	105KHZ	100KHZ
EFFICIENCY (.5-2.5A LOAD)	80%	92%	85%
THERMAL SHUT DOWN (AT SENSOR)	200' F	260' F	240' F
CASE TEMPERATURE AT SHUT DOWN	120'F	200'F	140' F
SHORT CIRCUIT VOLTAGE	.05VDC	2.0VDC	1.5VDC
SHORT CIRCUIT CURRENT	.1A	.5A	.1A