

1 . Features

- Wide 2 : 1 Input Range
- Low Ripple And Noise
- Input / Output Isolation 1.5K Vdc
- 100% Burn-In
- Input - Filter
- Custom Design Available
- Net Weight: 14.8 g Typical
- RoHS Converter Certified By SGS



2 . Single Output Selection Guide

(Specifications typical at Ta= +25 , Nominal input voltage, Rated output current unless otherwise noted)

Model No.	Input Voltage (Vdc)	Output Voltage (Vdc)	Output Current (mA) Max.	Input Current @No Load (mA) Typ.	Input Current @Max. Load (mA) Typ.	Output Ripple (mV) Max.	Load Regulation (%)Max.	Efficiency (%)Typ.
1) 8 W Single Output Series								
BQ-242R5S8M LF	18~36	2.5	3000	12	450	100	± 0.5	74
BQ-482R5S8M LF	36~75	2.5	3000	10	220	100	± 0.5	74
2) 10 W Single Output Series								
BQ-243R3S10M LF	18~36	3.3	3000	10	520	100	± 0.5	80
BQ-2405S10M LF		5	2000	10	510	100	± 0.5	81
BQ-2412S10M LF		12	833	15	496	100	± 0.5	84
BQ-483R3S10M LF	36~75	3.3	3000	10	260	100	± 0.5	78
BQ-4805S10M LF		5	2000	10	250	100	± 0.5	83
BQ-4812S10M LF		12	833	10	254	100	± 0.5	82

Notes :

1. Load regulation is for output current change from 0% to 100% Max. Load.

3 . Absolute Maximum Ratings

(Exceeding these values may damage the module. These are not continuous operating ratings)

Parameter	Condition	Min.	Typ.	Max.	Unit
Input Absolute Voltage Range	24V Input Model	-0.7	24	45	Vdc
	48V Input Model	-0.7	48	90	
Output Short Circuit Duration	Nominal Input Range	Indefinite & Auto-Restart			
Reverse Polarity Input Current Limit	---	---	---	1	A
Operation Temperature (Ambient Temperature)	Output Full Load	-40	---	+60	
Storage Temperature		-55	---	+105	

4 . Nominal Input/Output Electrical Specifications

(Specifications typical at Ta= +25 ,Nominal input voltage, Rated output current unless otherwise noted)

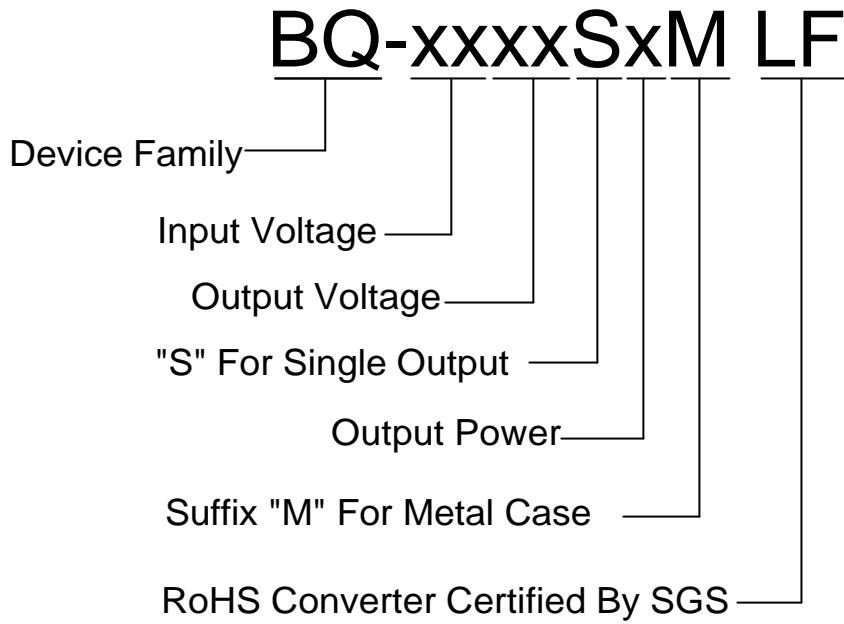
Parameter	Condition	Min.	Typ.	Max.	Unit
Input Voltage Range	24V Input Model	18	24	36	Vdc
	48V Input Model	36	48	75	
Line Regulation	Output Full Load	---	---	± 0.5	%
Load Regulation	Single Output Model	---	---	± 0.5	
Output Voltage Accuracy	Nominal Input	---	---	± 2.0	
Switching Frequency	Nominal Input	---	350	---	KHz
Temperature Coefficient		---	---	± 0.02	% /
Isolation Voltage	Standard Series	1500	---	---	Vdc
Isolation Resistance	Input To Output (500 Vdc)	1000	---	---	M
Isolation Capacitance	1KHz / 250mV rms	---	---	1000	pF

5 . General Specification

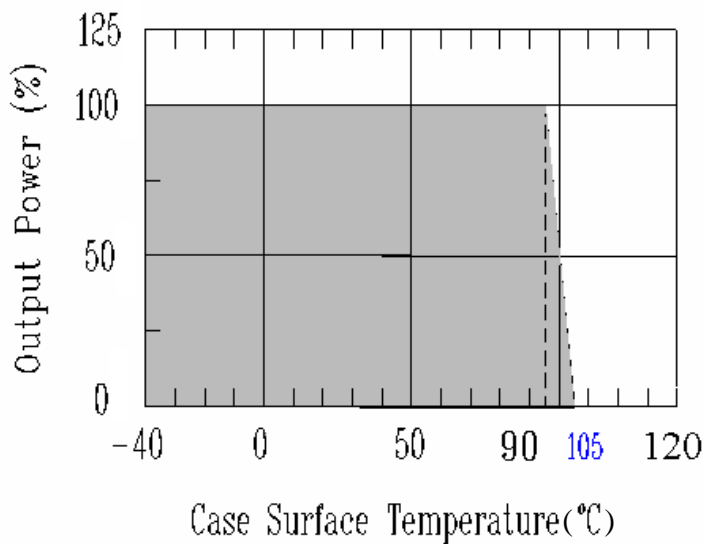
Parameter	Specification	Condition
Isolation Voltage	1500 Vdc	Test Duration 60 Seconds / 0.5 mA
Isolation Resistance	1000 M Min.	@ 500 Vdc
Operating Temperature (1)	-40 ~ +60	@ Ambient Temperature With Natural Convection
Operating Temperature (2)	-40 ~ +90	@ Case Surface Temperature
Storage Temperature	-55 ~ +105	---
Humidity	Up To 95 %	---
Cooling	Free Air Convection	---
Case Type	Metal	---



6 . Ordering Information

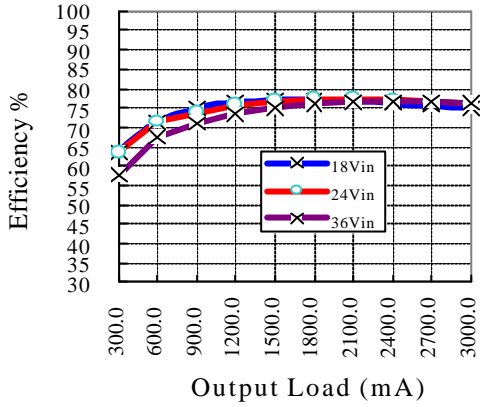


7 . Power Derating Curve

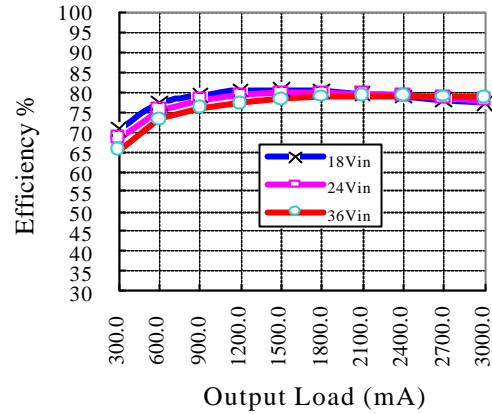


8 . Efficiency & Output Load Chart

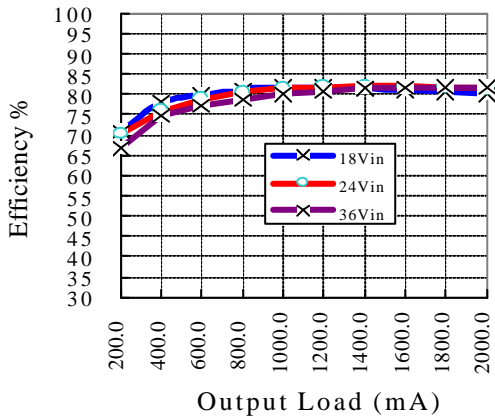
Vin=24/48V Vout= 2R5Vdc



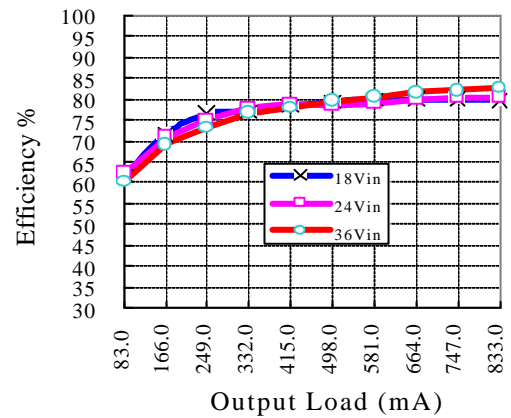
Vin=24/48V Vout= 3R3Vdc



Vin=24/48V Vout= 5 Vdc

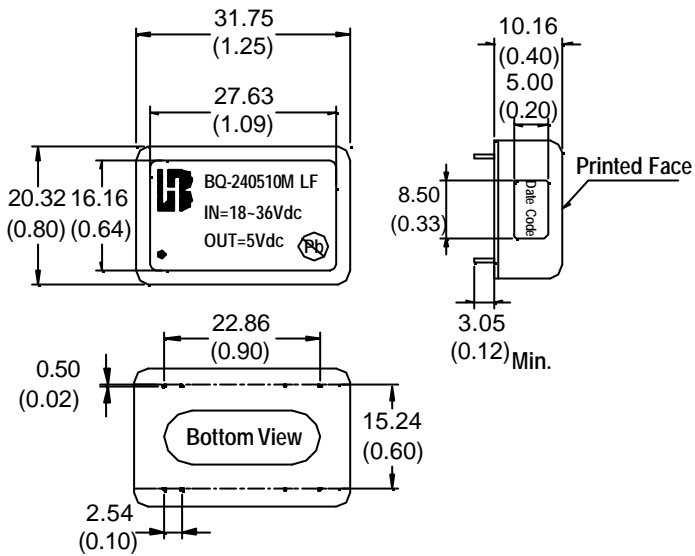


Vin=24/48V Vout= 12 Vdc



9 . Mechanical Dimension

Metal Case Model

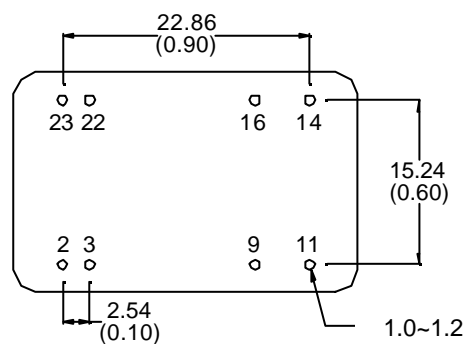


Pin	Single Output		Pin
1	No Pin	No Pin	24
2	-Vin	+Vin	23
3			22
4	No Pin	No Pin	21
5			20
6			19
7			18
8	N.C.	-Vo	17
9			16
10	No Pin	No Pin	15
11	N.C.	+Vo	14
12	No Pin	No Pin	13

Units : mm (inch)
 Tolerance : 0.xx ± 0.25 (0.xx ± 0.01)

10 . Recommended Footprint Details

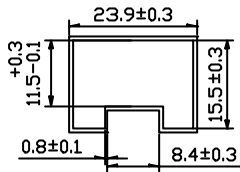
Metal Case Model



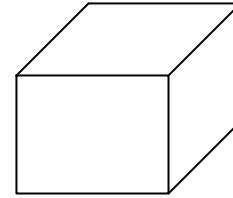
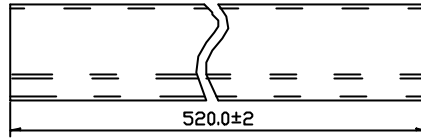
Units : mm (inch)
 Tolerance : 0.xx ± 0.25 (0.xx ± 0.01)



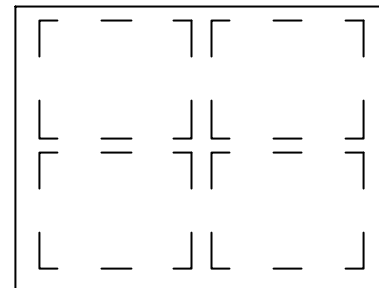
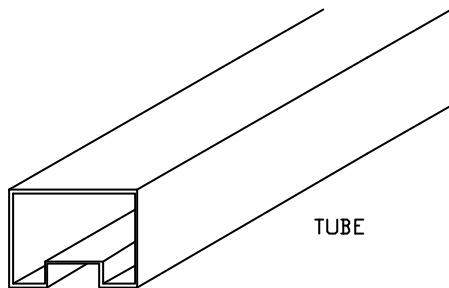
11 . Package



TUBE MECHANICAL DIMENSION



INNER CARTON:565*115*117



EXPORT CARTON:580*255*265

1. TUBE=15PCS
2. INNER CARTON=25 TUBE=25*15=375PCS
3. EXPORT CARTON=4 INNER CARTON=4*375=1500PCS