

1 Watts SMD Type DC - DC Converter



FEATURES

- ◆ Efficiency up to 81%
- ◆ Miniature SMD package
- ◆ 1500VDC isolation
- ◆ Industry Standard Pinout
- ◆ Internal SMD construction
- ◆ No external component required

SPECIFICATIONS

Input Voltage Range.....	See Model List
Line Regulation ¹	3.3V: $\pm 1.5\%$ / Others: $\pm 1.2\%$ max.
Load Regulation ²	3.3V: 18%; 5V: 12%; 9V: 8% 12V: 7%; 15V: 6%; 24V: 5% Typ.

Temperature Drift, 100% load..... $\pm 0.03\%/^{\circ}\text{C}$ Max.
Ripple & Noise(20MHzBW)....Vout $\leq 12\text{V}$, 30 mVp-p Max.
Vout = 15V, 24V.....60 mVp-p Max.

Short Circuit Protection.....	Continuous, auto-recovery
Isolation Voltage ³	1500VDC
Isolation Resistance ⁴	1000MΩ Min.
Switching Frequency.....	100KHZ Min.
MTBF.....	3500K hours
Storage Humidity Range.....	95% Max.
Operating Temperature Range.....	-40°C ~ +105°C
Storage Temperature Range.....	-55°C ~ +125°C
Temperature Rise at Full Load.....	25°C (Max)
Lead Temperature ⁵	300°C
Cooling.....	Free Air Convection
Case Material.....	Epoxy Resin (UL94-V0)
Weight.....	1.5g

Note:

(1) For V_{in} change of $\pm 1\%$

(2) Measured from 10% to 100% Load

(3) Input-output, tested for 60 sec. and leakage current less than 1 mA

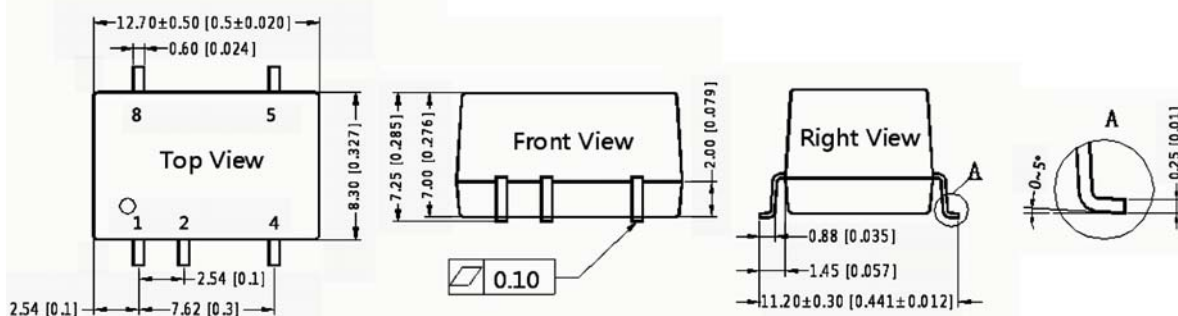
(4) Input-output, test at 500VDC

(5) 1.5mm from case for 10 sec.

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Model Number	Input Voltage (VDC)		Output			Eff. %
			Voltage (VDC)	Current (mA)		
	Nominal	Range		Max	Min	
GBX01-00	5	4.5~5.5	3.3	303	30	76
GBX01-01	5	4.5~5.5	5	200	20	80
GBX01-01B	5	4.5~5.5	9	111	12	80
GBX01-02	5	4.5~5.5	12	84	9	80
GBX01-03	5	4.5~5.5	15	67	7	80
GBX01-09	5	4.5~5.5	24	42	4	80
GBX01-10	12	10.8~13.2	3.3	303	30	75
GBX01-11	12	10.8~13.2	5	200	20	80
GBX01-11B	12	10.8~13.2	9	111	12	80
GBX01-12	12	10.8~13.2	12	84	9	81
GBX01-13	12	10.8~13.2	15	67	7	81
GBX01-21	24	21.6~26.4	5	200	20	80
GBX01-21B	24	21.6~26.4	9	110	11	80
GBX01-23	24	21.6~26.4	15	67	7	81
GBX01-29	24	21.6~26.4	24	42	4	81

MECHANICAL DRAWING (Unit:mm)



PIN CONNECTION	
Pin	Function
1	GND
2	V _{in}
4	0V
5	+V _o
8	NC

NC:No Connection

Note:

Unit: mm[inch]

Pin section tolerances: $\pm 0.10[\pm 0.004]$

General tolerances: ± 0.25 [± 0.010]