1 . Features

- Low Ripple and Noise
- High Efficiency Up To 76%
- Input / Output Isolation : 1K Vdc
- 100% Burn-In
- Input Filter With Internal Capacitor
- Custom Design Available
- Net Weight :1.5g or 1.7g Typical
- RoHS Converter Certified By SGS



Reference Only

2 . Model 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.
Single Output Series (1 KVdc)								
CCAR25-3R3S0	3.3	3.3	76	57	129	60	15	63
CCAR25-3R3S1		5	50	63	124	60	15	65
CCAR25-3R3SA		9	28	56	120	80	10	67
CCAR25-3R3S2		12	21	54	117	100	10	69
CCAR25-3R3S3		15	17	56	117	120	10	69
CCAR25-05S0	5	3.3	76	35	81	60	12	66
CCAR25-05S1		5	50	28	78	60	15	68
CCAR25-05SA		9	28	25	73	80	8	73
CCAR25-05S2		12	21	39	75	100	8	71
CCAR25-05S3		15	17	39	75	120	8	71
CCAR25-12S0	12	3.3	76	14	33	50	10	68
CCAR25-12S1		5	50	15	32	60	15	70
CCAR25-12SA		9	28	19	31	80	8	71
CCAR25-12S2		12	21	19	30	100	5	73
CCAR25-12S3		15	17	18	30	120	5	74

CCAR25-15S0	15	3.3	76	10	26	60	8	70
CCAR25-15S1		5	50	12	26	60	8	70
CCAR25-15SA		9	28	12	25	80	5	73
CCAR25-15S2		12	21	13	25	100	5	73
CCAR25-15S3		15	17	12	24	100	5	74
CCAR25-24S0	24	3.3	76	8	17	60	10	70
CCAR25-24S1		5	50	8	16	60	5	71
CCAR25-24SA		9	28	9	16	80	5	71
CCAR25-24S2		12	21	10	16	100	5	71
CCAR25-24S3		15	17	10	17	120	5	70

Notes :

1. Load regulation is for output current change from 10% 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	3.3V Input Model	-0.7	3.3	4.2	Vdc
	5V Input Model	-0.7	5	7	
	12V Input Model	-0.7	12	15	
	15V Input Model	-0.7	15	18	
	24V Input Model	-0.7	24	28	
Max. Output Power		---	---	1.0	W
Output Short Circuit Duration		---	---	1.0	Second
Operation Temperature (Ambient Temperature)	Output Full Load	-40	---	+85	℃
Storage Temperature		-55	---	+125	
Lead Temperature 1.5 mm From Case For 10 Seconds		---	---	+260	
Peak Airflow Temperature With CECC 00802 Profile		---	---	+245	

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	3.3V Input Model	2.97	3.3	3.63	Vdc
	5V Input Model	4.5	5	5.5	
	12V Input Model	10.8	12	13.2	
	15V Input Model	13.5	15	16.5	

Preference Only

	24V Input Model	21.6	24	26.4	
Output Voltage Accuracy	Nominal Input	---	3.0	5.0	%
Output Voltage Balance		---	---	±1.0	---
Switching Frequency		60	100	150	KHz
Temperature Coefficient		---	±0.01	±0.02	%/ ℃
Isolation Voltage	60 Second	1000	---	---	Vdc
Isolation Resistance	500Vdc	1000	---	---	MΩ
Isolation Capacitance	3.3V Input Model	6	12	20	pF
	5V Input Model	8	16	26	
	12V Input Model	8	16	28	
	15V Input Model	8	16	28	
	24V Input Model	8	16	30	
Max. Line Regulation (Per1.0% change in input change)	---	---	---	1.3	%

5 . General Specification

Parameter	Specification	Condition
Isolation Voltage	1000 Vdc	Test Duration 60 Seconds / 0.5 mA
Isolation Resistance	1000 MΩ Min.	@ 500 Vdc
Operating Temperature (1)	-40℃ ~ +85℃	@ Ambient Temperature With Natural Convention
Operating Temperature (2)	-40℃ ~ +95℃	@ Case Surface Temperature
Storage Temperature	-55℃ ~ +125℃	---
Humidity	Up To 90 %	---
Cooling	Free Air Convection	---

6 . Ordering Information

CCAR25 -XX XX

Device Family

Input Voltage

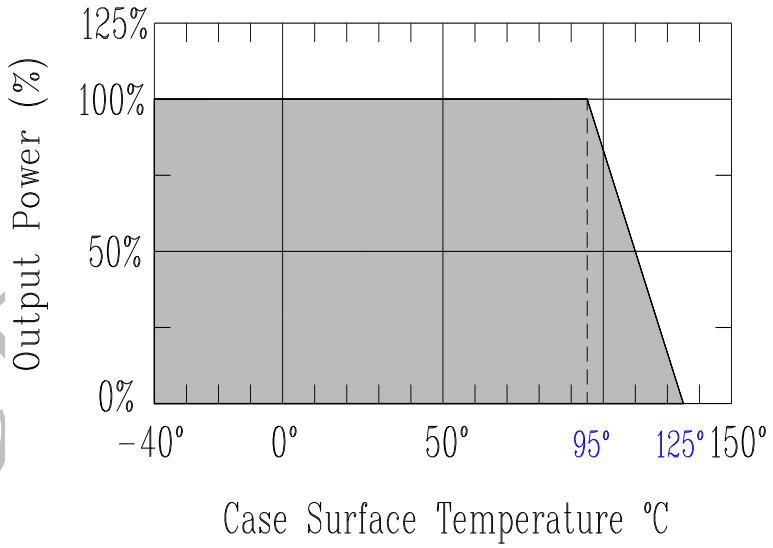
Output Voltage Code

Reference Only

PS: Output Voltage Code:
Single Output
S0:3.3V
S1: 5V
SA: 9V
S2: 12V
S3: 15V

7 . Performance Characteristics

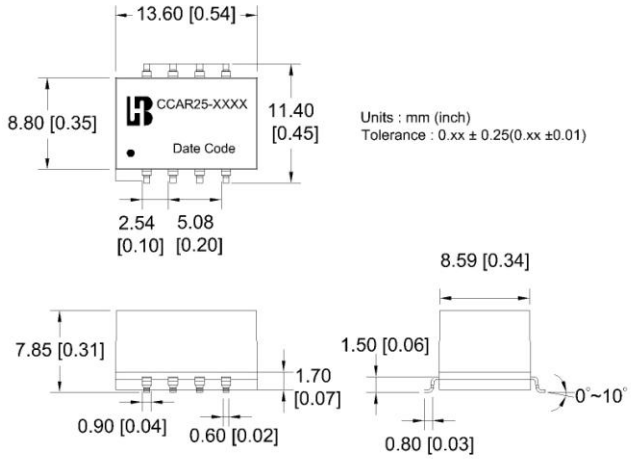
Temperature derating graph



Reference Only

8 . Mechanical & Pin Connections

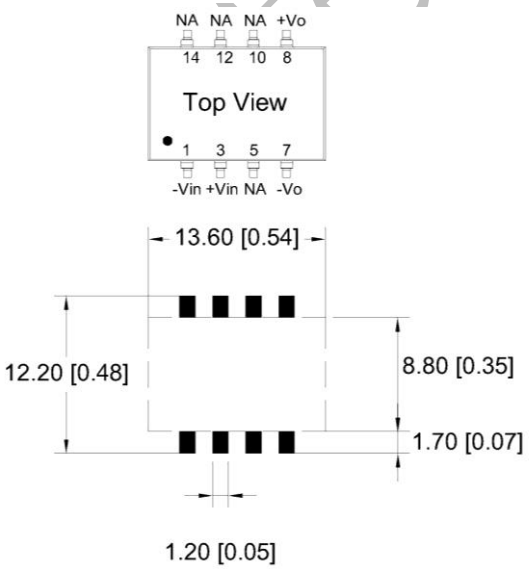
Single Output Series (For Isolation Voltage 1KVdc)



Pin	1 KVdc - Single		Pin
1	-Vin	NC	14
3	+Vin	NC	12
5	NC	NC	10
7	Vo (-)	Vo (+)	8

Note : "---" means Omitted

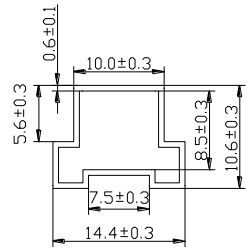
9. Recommended Footprint Details



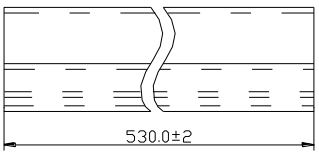
Units : mm (inch)
Tolerance : 0.xx ± 0.25(0.xx ±0.01)

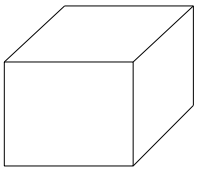
10. *Package*

Single Output Series For Isolation 1KVdc

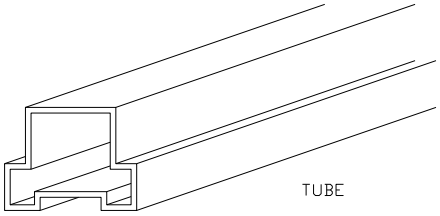


TUBE MECHANICAL DIMENSION

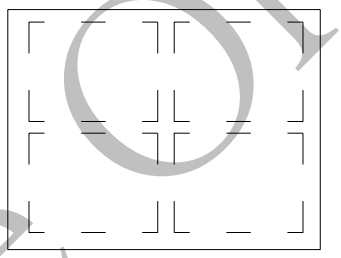




INNER CARTON:565*115*117



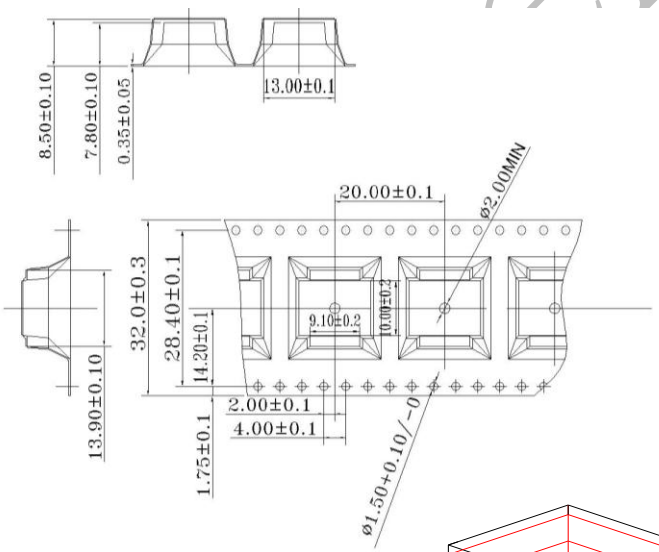
TUBE

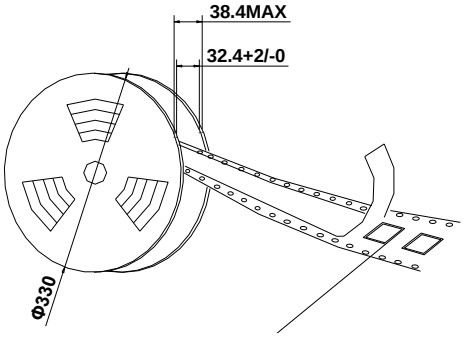


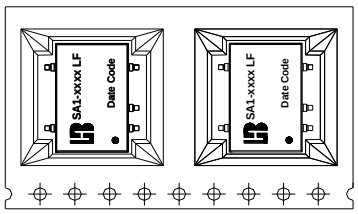
EXPORT CARTON:580*255*265

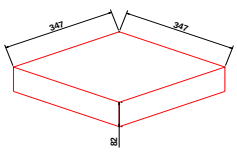
1. TUBE=37PCS
2. INNER CARTON=63 TUBE=63*37=2331PCS
3. EXPORT CARTON=4 INNER CARTON=4*2331=9324PCS

Single Output Series For Isolation 1KVdc

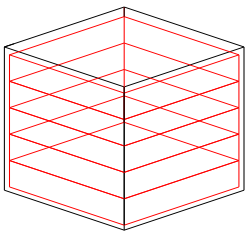








Inner Carton：347*347*82mm



Export Carton:375*375*460mm

1、Packaging Number of 13":350PCS/R
2、Inner Carton=1 R=1*350=350PCS
3、Export Carton=5 Inner Carton=5*350=1750PCS

Reference Only