

33W, 6A Non-isolated SMT Point Of Load

Features

- ◆ DOSA Compatible Footprint
- ◆ Surface Mountable
- ◆ Constant Switching Frequency
- ◆ Edge Plated Castellations (EPC)
 - Inspectable Solder Joints
- ◆ No external loop tuning components needed
- ◆ Excellent Transient Response



Key Market Segments & Applications



Specifications

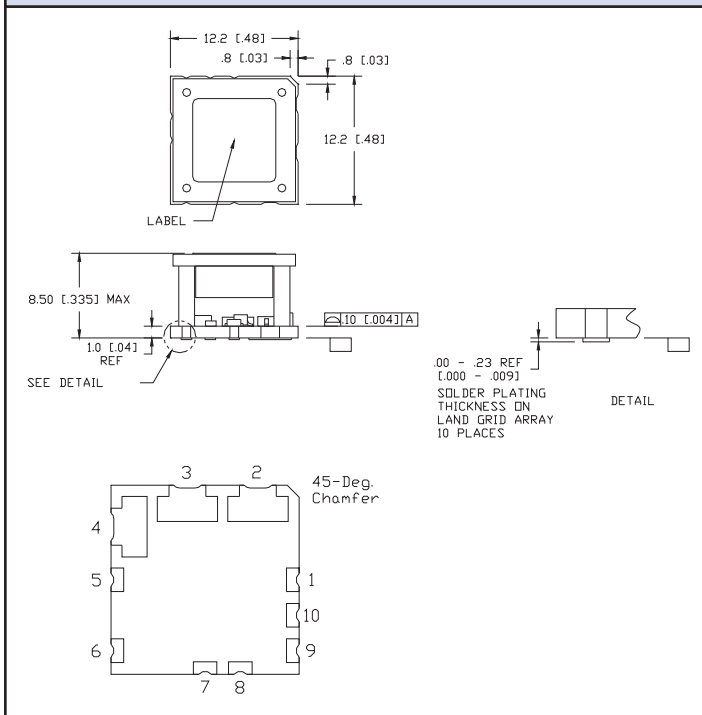
Model		iCG05	iCG12
DC Output Voltage	V	0.6 - 3.63	0.7 - 5.5
DC Input Voltage	V	2.4 - 5.5	4.5 - 14
Efficiency	%	84 - 93	84 - 94
Output Voltage Tolerance	%	±3	
Switching Frequency	kHz	600	
Line Regulation	mV	3	3
Load Regulation	mV	6	6
External Load Capacitance	uF	47 - 1000	
Output Ripple and Noise	mVpp	15	15
Overcurrent Protection	A	Hiccup Type	
Remote On / Off	-	Negative Logic (For Positive Logic Contact Factory)	
Remote Sense	-	(+) Sense, compensating up to 0.5V	
Power Good	-	Not available	Yes, Low on fail
Operating Temp	°C	-40 to 115 (see thermal data on website)	
Storage Temperature	°C	-55 to 125	
Safety Agency Approvals	-	IEC/UL/CSA/EN62368-1, 60950-1, CE Mark	
Weight	g / oz	3g / 0.106 oz	
Size (LxWxH)	mm / in.	12.2 x 12.2 x 8.5 / 0.48 x 0.48 x 0.335	
Warranty	yrs	3 years	

Model Selector

Model	Input Voltage (V)	Output Current (A)	Output Voltage (V)	Positive Logic On/Off	Negative Logic On/Off	Sequencing	Solder Bumping
iCG05006A006V-001-R	2.4 - 5.5	6	0.60 - 3.63	-	X	X	EPC
iCG05006A006V-003-R	2.4 - 5.5	6	0.60 - 3.63	-	X	-	EPC
iCG05006A006V-006-R	2.4 - 5.5	6	0.60 - 3.63	X	-	-	LGA
iCG05006A006V-007-R	2.4 - 5.5	6	0.60 - 3.63	-	X	-	LGA
iCG12006A007V-001-R	4.5 - 14	6	0.70 - 5.5	-	X	X	EPC
iCG12006A007V-003-R	4.5 - 14	6	0.70 - 5.5	-	X	-	EPC
iCG12006A007V-006-R	4.5 - 14	6	0.70 - 5.5	X	-	-	LGA
iCG12006A007V-007-R	4.5 - 14	6	0.70 - 5.5	-	X	-	LGA

Preferred Model

Outline Drawing



Pinout

PIN	Function	PIN	Function
1	ON / OFF	6	TRIM
2	VIN	7	GND
3	GND	8	no connection
4	VOUT	9	reserved
5	SENSE	10	PWR GOOD

Other Industrial Products

CC-E	1.5 - 30W 5, 12, 24 or 48V input isolated DC-DC converters
PX	10 - 60W 12, 24 or 48V input isolated DC-DC converters
iAF, iBF, iCF	3 - 20A DOSA2 non isolated DC-DC converters

For Additional Information, please visit
<https://product.tdk.com/en/power/>

