

NEW



Features

- Ultra-high isolation voltage up to **17 kV** (input to output)
- Compact fully encapsulated module
- 40°C to +70°C operation without derating
- PCB mountable
- Fixed Switching frequency provides predictable EMI
- High reliability and cost-effectiveness
- Continuous Short Circuit Protection

Application

- **Medical**
- Railway System
- Industry Control System

Demo photo only. Actual product outlook and marking may vary.

Star Dust – Genesis series is composed customized high Isolation, board-mountable, fixed switching frequency dc-dc converters in various industrial standard packages, including SIP16 in this data sheet. These DC-DC converter modules use advanced power processing, control and packaging technologies to enhance the performance, flexibility, reliability and cost effectiveness of mature power components. Each module is supplied completely encased to provide protection from the critical environments seen in many industrial and applications in harsh environments



MODEL NUMBER STRUCTURE

SDG	018	033	-	D	-	02 V0
Series Name	Input Voltage (VDC)	Output Voltage (VDC)		Output Quantity		Watt
Star Dust – Genesis series –	050 : 4.5-5.5	050 : 5		Single		02
	015 : 13.5-16.5	120 : 12				
	024 : 24.5-26.5	150 : 15				
		050 : ±5		D: Dual		03
		120 : ±12				
		150 : ±15				

Model Selection Guide

Typical @ Ta=+25°C under nominal line voltage and full load conditions unless otherwise noted.

Model	Input		Output			Typ. Efficiency Nom. Vin, @FL
	Voltage(V)		Voltage	Current	Power	
	Range	Nominal	(V)	(A)/Channel	(W)	Typ.(%)
SDG050050-D-02V0	4.5-5.5	5	±5	0.2	2	78%
SDG024050-D-02V0	24.5-26.5	24	12	0.7	2	78%
SDG050050-03V0	4.5-5.5	5	5	0.6	3	78%
SDG050050-D-03V0	4.5-5.5	5	±5	0.2	3	78%
SDG150150-D-03V0	13.5-16.5	15	±15	0.2	3	78%
SDG024150-D-03V0	24.5-26.5	24	±15	0.1	3	77%

※ The typ. Efficiency is for reference only.

Electrical Specifications (Typical @ Ta=+25°C under nominal line voltage conditions unless noted.)

Input Specifications

Parameter	Notes and Conditions	Min.	Typ	Max.	Unit
Operating Input Voltage ranges		23.5	24	26.5	VDC
Under-Voltage Lockout Start up voltage		23			VDC
Under-Voltage Lockout Shutdown voltage				22.5	VDC

Output Specifications

Parameter	Notes and Conditions	Min.	Typ	Max.	Unit
Load Regulation	10%Load→100%Load		5		%
Output Ripple & Noise Voltage	Bandwidth 20MHz and with 1uF MLCC.Output Capacitor each output		1.5		%Vp-p
Transient Peak Deviation	50%~75% load		±10		%Vo
Short Circuit Protection	Yes				
Output Power Protection	V _{NOM} Current limit		140		%

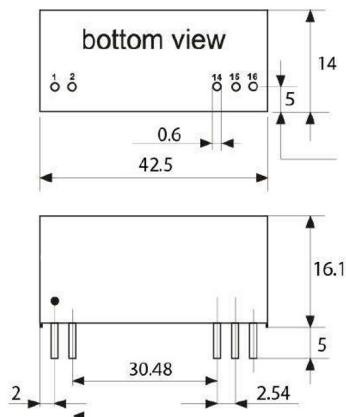
General Specifications

Parameter	Notes and Conditions	Min.	Typ	Max.	Unit
Switching Frequency	V _{NOM}	220	250	330	KHz
Storage Temperature range	All models, T _c	-55		125	°C
Operating Case Temperature	All models	-45		105	°C
Couple Capacitance			50		pF
Isolation Voltage	<i>Continuous</i>	5K			VDC
Input to Output					
Weight			TBD		g (oz.)
Dimensions	See below mechanical drawing				
Case Material	Plastic				
Safety Compliance	In accordance to IEC60601-1, IEC60601-2-2				

It is recommended to protect the input by fuses or other protection devices.

The information and specifications contained in this data sheet are believed to be correct at time of publication. All specifications are subject to change without notice. No rights under any patent accompany the sale of any such products or information contained herein.

Mechanical drawing and pin assignment:



All dimension in mm, tolerance: .x±0.5mm]

Pin Connection		
PIN	Single Output	Dual Output
1	+Vin	+Vin
2	-Vin	-Vin
14	+Vout	+Vout
15	N/A	-Vout
16	COM	COM