AM40K-C Series



40 watt dc-dc converters

- POWER MODULES FOR PCB MOUNTING
- SIX-SIDED CONTINUOUS SHIELD
- HIGH EFFICIENCY
- STANDARD PACKAGE

GENERAL DESCRIPTION

Our AM40K-C series is a family of cost effective 40W single output DC-DC converters. These converters are shielded on all six sides and encapsulated with a nickel-coated copper with a non-conductive base and dimensions of 50.8x40.64x10.8mm. The high performance features of our AM40K-C components include short circuit protection with hiccup auto recovery, tight line regulation and a high efficiency operation coefficient up to 89%.

Seven models operate from an input voltage of 48VDC producing output voltages of 1.8, 2.5, 3.3, 5, 12, 15 & 24VDC. The normal operation is specified over the full operating temperature range of -25°C to +71°C with no derating required. Cooling is done by free air convection.

 $\pm 2\%$, max.

<0.2% Vout +20mVmax (Vp-p)

<0.5% Vout +50mVmax (Vp-p)

ELECTRICAL SPECIFICATIONS

All specifications valid at nominal input voltage, full load and +25°C after warm-up time unless otherwise stated.

Input Specifications:		Output Specifications:
Voltage range	48 VDC, 36~75VDC	Voltage accuracy
Filter	p (Pi) Network	Ripple
		Noise
Isolation Specifications:		Short circuit protection
Rated voltage	1500VDC	Over current protection
Resistance	>1000 Mohms	·
Capacitance	1000pF	Over voltage protection
		Line regulation (HL-LL)
General Specifications:		Load regulation (10-100%
Efficiency	80% to 89%	Temperature coefficient
Switching frequency	400KHz, typ. 100% load	*
		Physical Specifications:
Environmental Specifications:		Dimensions
Operating temperature	-25°C+71°C	
Storage temperature	-55°C+105°C	Weight
Case temperature	+95°C, max.	Case material
Humidity (non-condensing)	Up to 95%	
Cooling	Free-air convection	

Short circuit protection	Hiccup, auto-recovery		
Over current protection	Works over 120% of rating		
	and recovers automatically		
Over voltage protection	a Zener diode clamp protection		
Line regulation (HL-LI	$\pm 0.5\%$, typ.		
Load regulation (10-100%) $\pm 1\%$, typ.			
Temperature coefficien	t $\pm 0.02\%$ /°C, typ.		
Physical Specifications:			
Physical Specification	S:		
Physical Specification Dimensions	50.8x40.64x10.8mm,		
	50.8x40.64x10.8mm,		
Dimensions	50.8x40.64x10.8mm, 2.0x1.6x0.43inches		
Dimensions Weight	50.8x40.64x10.8mm, 2.0x1.6x0.43inches 58g		

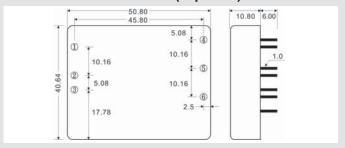
MTBF: > 550,000 hrs (MIL-HDBK-217F, Ground Benign, t=+25°C)

Specifications are subject to change without notification

AM40K-C Series

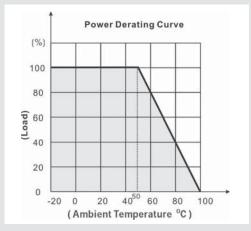
OUTLINE DIMENSIONS & PIN CONNECTIONS

MECHANICAL DIMENSION (Top View)

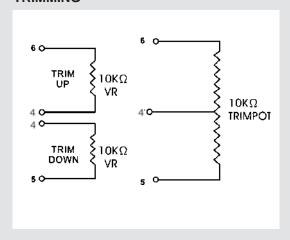


Pin	Single	
1	On/Off Control (Optional)	
2	-V Input	
3	+V Input	
4	Trim	
5	-V Output	
6	+V Output	

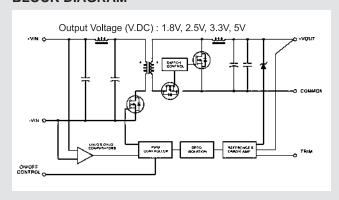
DERATING

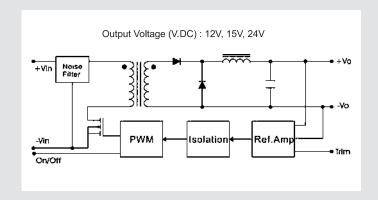


TRIMMING



BLOCK DIAGRAM





MODELS Single output

Models	Input Voltage	Ouput Voltage	Ouput Current max.
AM40K-4801SC	36VDC-75VDC	1.8VDC	8000mA
AM40K-4802SC		2.5VDC	8000mA
AM40K-4803SC		3.3VDC	8000mA
AM40K-4805SC		5VDC	8000mA
AM40K-4812SC		12VDC	3300mA
AM40K-4815SC		15VDC	2660mA
AM40K-4824SC		24VDC	1660mA