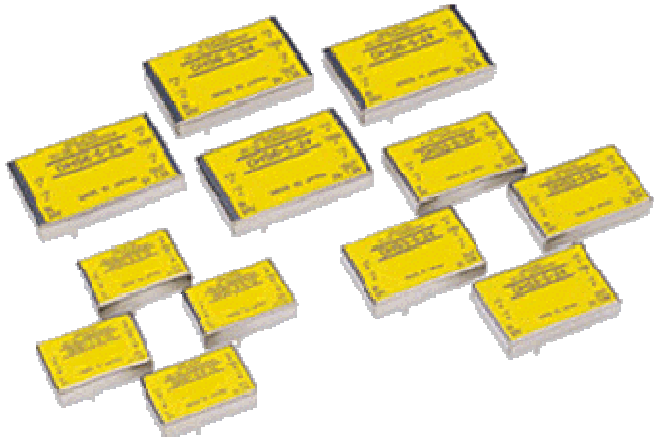
ETA-USA

HIGH QUALITY SWITCHING POWER SUPPLIES

DC/DC SWITCHING POWER SUPPLY
DC INPUT 5,12,24,48
SINGLE OUTPUT
3 WATTS



PMQ3-SC-NG SERIES

General Description

PM Q 3 - x S C x - NG

- PM: Series Name
- Q: Wattage: Q...3W
- 3: Output power
- x: Output Voltage
- S: Single Output
- C: Input Voltage
- x: Internal Code

Dimension [mm]: 35×23×7 (W×D×H)

DC INPUT: 5V

Input Characteristics	Unit	PMQ3-3.3SC05-NG	PMQ3-05SC05-NG	PMQ3-12SC05-NG	PMQ3-15SC05-NG
Rated input voltage	Vdc	DC 5V			
Input voltage range	Vdc	DC 4.5~9V			
Input current (typ.)	A	0.557	0.81	0.8	0.779
Efficiency *1	%	71%	74%	75%	77%

DC INPUT: 12V

Input Characteristics	Unit	PMQ3-3.3SC12-NG	PMQ3-05SC12-NG	PMQ3-12SC12-NG	PMQ3-15SC12-NG
Rated input voltage	Vdc	DC 12V			
Input voltage range	Vdc	DC 9-18V			
Input current (typ.)	A	0.226	0.329	0.316	0.316
Efficiency *1	%	73%	76%	79%	79%

DC INPUT: 24V

Input Characteristics	Unit	PMQ3-3.3SC24-NG	PMQ3-05SC24-NG	PMQ3-12SC24-NG	PMQ3-15SC24-NG
Rated input voltage	Vdc	DC 24V			
Input voltage range	Vdc	DC 18 ～ 36V			
Input current (typ.)	A	0.113	0.165	0.163	0.162
Efficiency *1	%	72%	75%	76%	77%

DC INPUT: 48V

Input Characteristics	Unit	PMQ3-3.3SC48-NG	PMQ3-05SC48-NG	PMQ3-12SC48-NG	PMQ3-15SC48-NG
Rated input voltage	Vdc	DC 48V			
Input voltage range	Vdc	DC 36 ～ 75V			
Input current (typ.)	A	0.058	0.084	0.081	0.081
Efficiency *1	%	71%	74%	77%	77%

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email at: sales@eta-usa.com

PMQ3-xSCx-NG

Output Characteristic	Unit	Models			
		PMQ3-3.3SCx-NG	PMQ3-05SCx-NG	PMQ3-12SCx-NG	PMQ3-15SCx-NG
Rated Output Voltage	Vdc	3.3	5	12	15
Rated Output Power	W	1.98	3	3	3
Rated Output Current	A	0.6	0.6	0.25	0.2
Output voltage range *1	%	±3%			
Ripple Noise(Max.)	mV p-p	60	60	90	90
Regulation					
a. Line Regulation	mV	20	20	48	60
b. Load Regulation	mV	40	40	100	120
c. Temperature Regulation*2	mV	50	50	150	180

Environmental Specification				
Operating Temperature *4	Convection cooling:-20～+71℃ Forced air cooling:-20～+85℃			
Operating Humidity	20～95%RH (No dew condensation permitted)			
Storage Temperature	-40～+85℃			
Storage Humidity	20～95%RH (No dew condensation permitted)			
Cooling	Convection cooling / Forced air cooling			
Dielectric Strength				
Withstand Voltage	Input-FG 500VAC for 1 min. Input-Output 500VAC for 1 min. Output-FG 500VAC for 1min.			
Insulation Resistance	Input-FG 50MΩ at 500VDC Input-Output 50MΩ at 500VDC Output-FG 50MΩ at 500VDC			
Functions				
Over Current Protection	Automatic recovery			
	0.63A～	0.63A～	0.262A～	0.21A～
Over Voltage Protection	N/A			
	3.8V～	5.75V～	13.8V～	17.3V～
Trimming of output voltage *3	+10% -15%	±10%		
Input fuse	Built-in			
Structure & Others				
Vibration Resistance	10～55Hz Acceleration:98m/s2(10G) Cycle: 3min. Direction: X,Y,Z for 1 hour each			
Shock Resistance	Acceleration:490.3m/s2(50G) Time: 11ms Direction: X,Y,Z for 1hour each			
Mechanical				
Dimension [mm]	35×23×7 (W×D×H)			
Weight [g](typical)	14g			

Conditions:

*1 At Rated input voltage, Rated output current, Operating temp. 25℃

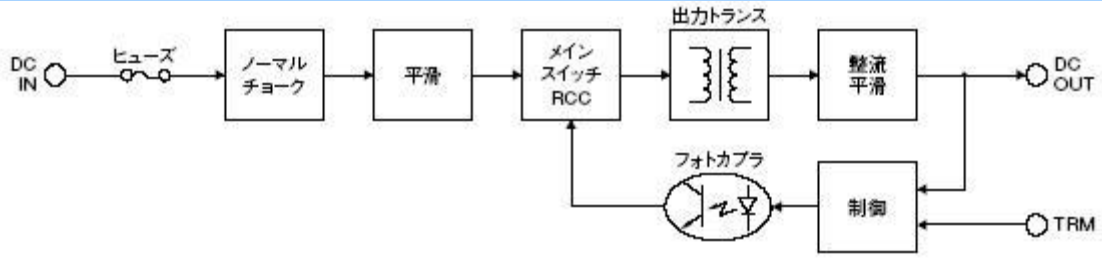
*2 At operating temp. -20～+71℃

*3 Possible by inserting appointed resistor at outside.

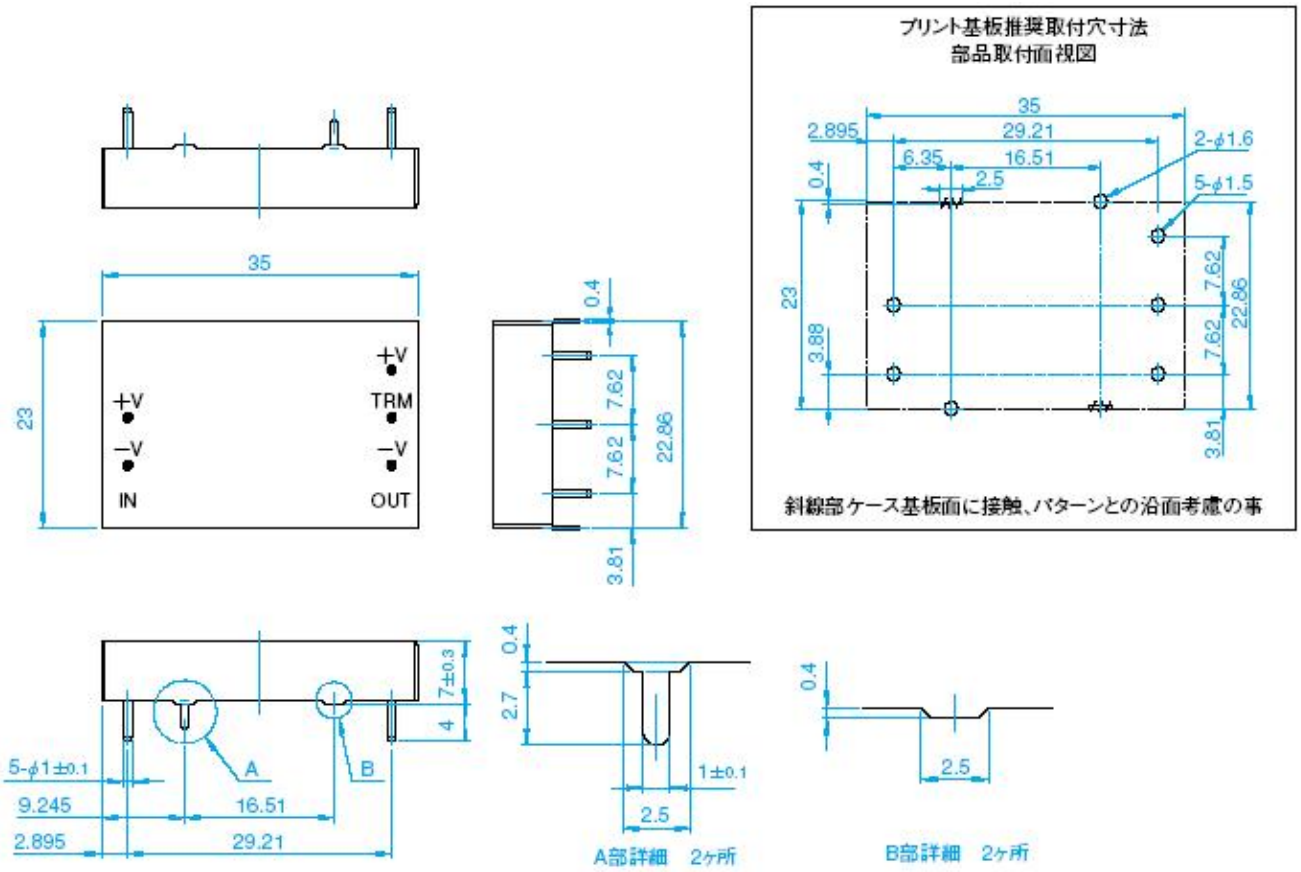
*4 Load should be reduced for operation at 55℃ or above at convection cooling, and at 70℃ or above at forced air cooling.

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BLOCK DIAGRAM



DIMENSION DIAGRAM (mm)



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