



ETA-USA

HIGH QUALITY SWITCHING POWER SUPPLIES

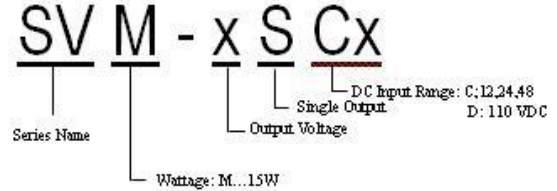
DC/DC SWITCHING POWER SUPPLY
DC INPUT 12,24,48, 110
SINGLE OUTPUT
15WATTS

SVM-SCx/SVM-SD SERIES



Dimension: 60W x 83L x 20H

General Description



Features

1. Variety of Models
2. Chassis mount type
3. Compact and High Efficiency
4. Screw Connector

DC INPUT: 12V

Input Characteristics	Unit	SVM05SC12	SVM12SC12	SVM15SC15	SVM24SC12	SVM48SC12
Input Voltage	Vdc	DC 12V				
Input Voltage Range	Vdc	DC 9.2V-16V				
Inrush Current	A	Not Specified				
Efficiency (typical) *1	%	79	80	82	83	83
MTBF	H	660'000				
Switching Frequency	kHz	90 Fix	90 Fix	90 Fix	90 Fix	90 Fix

DC INPUT: 24V

Input Characteristics	Unit	SVM05SC24	SVM12SC24	SVM15SC24	SVM24SC24	SVM05SC24
Input Voltage	Vdc	DC 24V				
Input Voltage Range	Vdc	DC 19-32V				
Inrush Current *1	A	Not Specified				
Efficiency (typical) *2	%	79	81	82	84	85
MTBF	H	750'000				
Switching Frequency	kHz	90 Fix	90 Fix	90 Fix	90 Fix	90 Fix

DC INPUT: 48V

Input Characteristics	Unit	SVM05SC48	SVM12SC48	SVM15SC48	SVM24SC48	SVM05SC48
Input Voltage	Vdc	DC 48V				
Input Voltage Range	Vdc	DC 38-63V				
Inrush Current *1	A	Not Specified				
Efficiency (typical) *2	%	81	83	84	86	86
MTBF	H	750'000				
Switching Frequency	kHz	90 Fix	90 Fix	90 Fix	90 Fix	90 Fix

DC INPUT: 110V

Input Characteristics	Unit	SVM05SD	SVM12SD	SVM15SD	SVM24SD	SVM05SD
Input Voltage	Vdc	DC 110V				
Input Voltage Range	Vdc	DC 85-140V				
Inrush Current *1	A	20A (maximum) at DC110V				
Efficiency (typical) *2	%	81	83	84	86	86
MTBF	H	600'000				
Switching Frequency	kHz	90 Fix	90 Fix	90 Fix	90 Fix	90 Fix





ETA-USA

HIGH QUALITY SWITCHING POWER SUPPLIES

SVM-SC / SVM-SD

Output Characteristic	Unit	Models				
		SVM05SCx / SD	SVM12SCx / SD	SVM15SCx / SD	SVM24SCx / SD	SVM48SCx / SD
Output Voltage	V	5	12	15	24	48
Output Current Vin=12 Vin=24,48,110	A	5.0	2.1	1.7	1.1	0.5
		3.0	1.3	1.0	0.7	0.35
Voltage Adjust Range	V	+/-10% of Rated Output Voltage (at no load within input range)				
Ripple Noise(max)*3 Vin=12 Vin=24,48,110	mVpp	100	170	200	290	530
		150	220	250	340	580
Rise up time Vin=12,24 Vin=48,110	mS	100mS(maximum) at 25°C and rated input/output 500mS(maximum) at 25°C and rated input/output				
Hold up time	mS	Not specified				
Regulation						
a. Line Regulation (max)	mV	40	96	120	192	384
b. Load Regulation (max)	mV	45	108	135	216	432
c. Temperature Coefficient *4	°C	0.03%/°C				
d. Drift(maximum) *5	mV	40	75	90	135	255
e. Dynamic Load Regulation (typ.) *5	mV	150	360	450	720	1440
f. Recovery Time*6 Vin=12 Vin=24,48,110	mS	0.5mS(typical)				
		0.3mS(typical)				

*1 at cold start

*2 at rated input/output

*3 measured by a bayonet probe at the output connector at a 0 to 100MHz bandwidth

*4 at 0 to +50°C

*5 for 7hour period after 1hour warm-up at 25°C and rated input/output

*6 when output current changed from 25% to 75% of rated output current rapidly at rated input

Environmental Specification	
Operating Temperature	0 to +50°C
Operating Humidity	85%RH (non-condensing)
Storage Temperature	-20 to +85°C
Storage Humidity	85%RH (non-condensing)
Withstanding Voltage	Primary-Secondary AC2,000V for 1minute (Vin=110 2000) Primary-Frame Ground AC2,000V for 1minute (Vin=110 2000) Secondary-Frame Ground AC500V for 1minute
Isolation Resistance	Primary-Secondary-Frame Ground 50MΩ (minimum) by DC500V insulation ester
Vibration	5-10Hz:10mm double amplitude, 10-55Hz:19.6m/s ² , 20minutes' period for 60minutes each along X,Y,Z axes (non-operating)
Shock	294m/s ²
Cooling	Convection
Functions	
Over current Protection ≥110% of Rated Output [A]	Current Limiting with automatic recovery 3.30 1.43 1.10 0.77 0.39
Over voltage Protection ≥110% of Rated Output [V]	Output shutdown (to reset, leave 1minute after shutdown) 5.50 13.2 16.5 26.4 52.8
Remote Sense	not available
Remote On/Off	not available
Reverse Voltage Protection	by internal fuse (for Vin=110V by internal bridge diode)
Line Conduction Noise	Not specified
Weight [g] (typical)	120 G
Dimension [mm]	60W × 83L × 20H



ETA USA

16170 Vineyard Blvd. Suite 180, Morgan Hill, CA 95037

Phone: 1-800-ETA-POWER, (408) 778-2793 Fax: (408) 779-2753

Visit us at: www.eta-usa.com

email at: sales@eta-usa.com

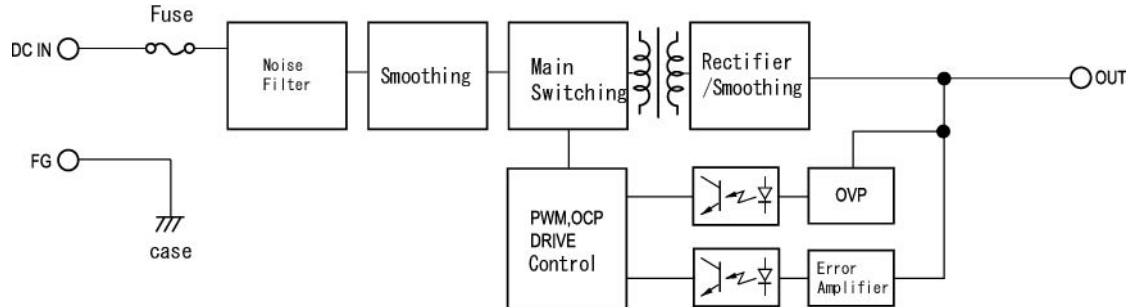


ETA-USA

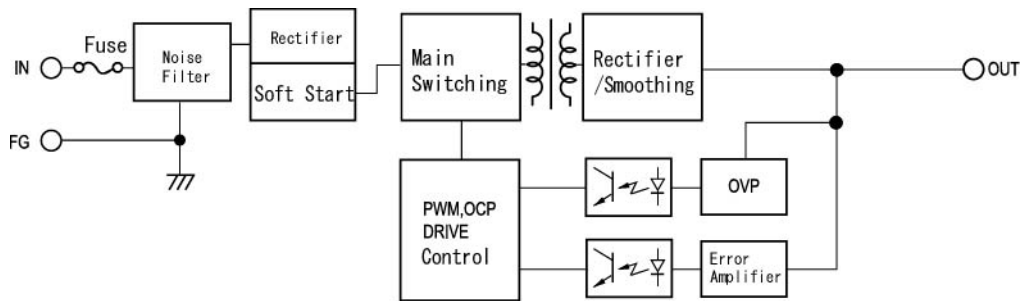
HIGH QUALITY SWITCHING POWER SUPPLIES

BLOCK DIAGRAM

SVMxSCx:



SVMxSD:



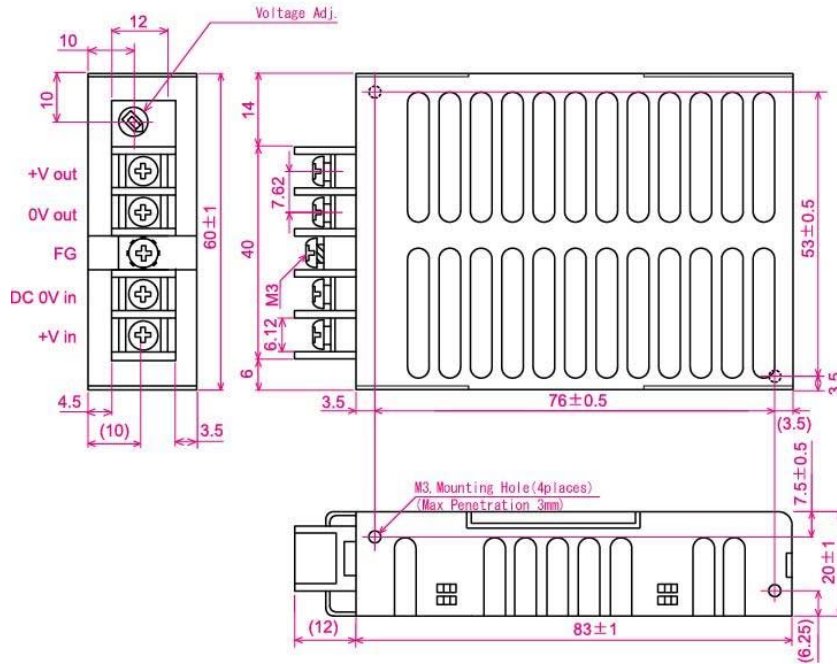
DIMENSION DIAGRAM (mm)



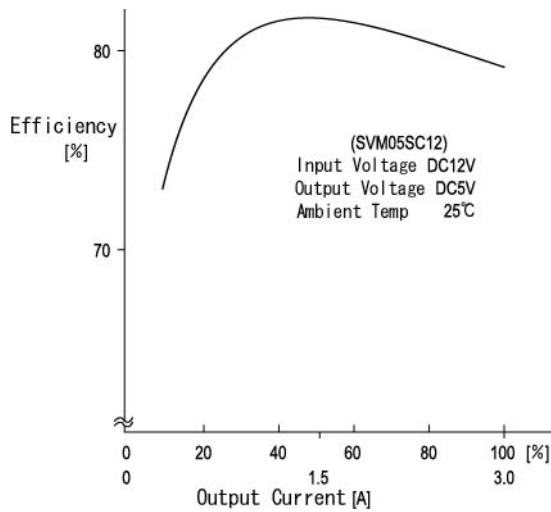


ETA-USA

HIGH QUALITY SWITCHING POWER SUPPLIES



EFFICIENCY CURVE



OCP CURVE

