

SMPS Desktop Power Supply - NEW

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SMPS Desktop Power Supply - NEW

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Application Overview

The power supply provides the power required by the electronic device. A stable power supply can provide the best working performance of the electronic device, and a high-efficiency power supply can also save energy consumption. Vishay provides high-quality and high-performance solutions, including high-performance MOSFETs, power diodes, and peripheral discrete components, which can help engineers obtain the most comprehensive solution in the shortest time. High-efficiency MOSFETs provide the best switching characteristics in the industry. Therefore, the switching loss is the lowest, so the overall efficiency performance is better than the market. In addition, the recently released low-on-voltage bridge rectifier provides the lowest forward-voltage in the industry. It also provides improvements in energy efficiency of the power supply.

SMPS Desktop Power Supply - NEW : 12V/5V/3.3V Output, Output Filter

Aluminum Capacitor

Product Name	Status	Description	Features	Package	Q-Level
136RVI		Aluminum Capacitors Radial Very Low Impedance	C=22 to 10000 μ F; Vr=10 to 100 V Temp=-55 to +105 °C; Useful life at 105 °C 4000 to 10000 hours	10 x 12 to 18 x 35	

Multilayer Ceramic Chip Capacitors

Product Name	Status	Description	Features	Package	Q-Level
VJ...W1BC		Surface Mount Multilayer Ceramic Chip Capacitors	COG(NPO) :C=0.5pF to 39nF, Vr=10V to 100 V X7R:C=100 pF to 47 μ F, Vr=10V to 100 V	SMD	

SMPS Desktop Power Supply - NEW : 12V/5V/3.3V Output, Output Rectifier

Low Voltage MOSFETs

Product Name	Status	Description	Features	Package	Q-Level
SiR106DP		N-Channel 100V (D-S) MOSFET	Vdss= 100V; Rdson= 8mΩ; Id=66A;	PowerPAK SO-8	
SiRA10BDP		N-Channel 30V (D-S) MOSFET	Vdss=30V; Rdson=3.6mΩ; Id=60A;	PowerPAK SO-8	

Schottky Diode

Product Name	Status	Description	Features	Package	Q-Level
V30100C		Dual High-Voltage Trench MOS Barrier Schottky Rectifier	IF(AV)=2 x 15 A; VRRM=100 V VF=0.627 V; Tj max.=150 °C	TO-220AB	
V40100C		Dual High-Voltage Trench MOS Barrier Schottky Rectifier	IF(AV)=2 x 20 A; VRRM=100 V VF=0.61 V; Tj max.=150 °C	TO-220AB	
VFT4045C-M3		Dual Low-Voltage Trench MOS Barrier Schottky Rectifier	IF(AV)=2 x 20 A; VRRM=45 V VF=0.41 V; Tj max.=150 °C	TO-220AB	

SMPS Desktop Power Supply - NEW : 90Vac ~264Vac, Bulk Cap

Snap-In Aluminum Capacitor

Product Name	Status	Description	Features	Package	Q-Level
094 series		Aluminum Capacitors; Power Miniaturized Economy Long Life Snap-in	C=47 to 680 μ F; Vr=400,450V Temp=-25 to +105 °C Useful life at 105 °C=:2000 hours	22 x25 to 35 x 50	

SMPS Desktop Power Supply - NEW : 90Vac ~264Vac, EMI Filter

X-Capacitor

Product Name	Status	Description	Features	Package	Q-Level
F339 X1		Interference Suppression Film Capacitor Class X1- MKP 330Vac	C=0.001 μ F to 2.2 μ F AC 330 V Temp=110 °C; 12 class	7.5mm to 27.5mm lead pitch	
F339M X2		Interference Suppression Film Capacitors Class X2- MKP 310Vac	C=0.001 μ F to 4.7 μ F AC 310 V Temp=110 °C; X2 class	7.5mm to 52.5 mm lead pitch	

Y-Capacitor

Product Name	Status	Description	Features	Package	Q-Level
VY1		Ceramic Disc Capacitors;Safety Safety Standard Approved Disc Capacitor	C=10 pF to 4700 pF (Y1);500 V (AC), 50 Hz Temp=- 40 °C to + 125 °C	10 mm lead pitch	
VY2		Ceramic Disc Capacitors Safety Standard Approved Disc Capacitor	C=68 pF to 10000 pF 300 V (AC), 50 Hz;Temp=- 40 °C to + 125 °C	7.5 and 12.5mm lead pitch	

SMPS Desktop Power Supply - NEW : 90Vac ~264Vac, Input Rectifier

Bridge Diode

Product Name	Status	Description	Features	Package	Q-Level
GBU6J		Glass Passivated Single-Phase Bridge Rectifier	IF(av)=6A;Vrrm=50V to 1000V Ifsm=175A;Vf=1V;Tjmax=150#	GBU	
GBU8J		Glass Passivated Single-Phase Bridge Rectifier	IF(av)=8A;Vrrm=50V to 1000V Ifsm=200A;Vf=1V;Tjmax=150#	GBU	
LVB1560		High Current Density Single-Phase Bridge Rectifier	IF(av)=15A;Vrrm=600V fsm=400A;Vf=0.73V;Tjmax=150#	GSIB-5S	
LVB2560		High Current Density Single-Phase Bridge Rectifier	IF(av)=25A;Vrrm=600V Ifsm=550A;Vf=0.76V;Tjmax=150#	GSIB-5S	

SMPS Desktop Power Supply - NEW : 90Vac ~264Vac, PFC Stage

General Rectifier Diode

Product Name	Status	Description	Features	Package	Q-Level
S8CK		Surface-Mount Glass Passivated Rectifier	IF(av)=8A Vrrm=600V Vf=0.87V;Tjmax=150#	DO-214AB(SMC)	

High Voltage MOSFETs

Product Name	Status	Description	Features	Package	Q-Level
SiHP22N60AE		E Series Power MOSFET	Vdss=600V;Rdson=0.156Ω Id=20A;Qg=96nC	TO-220AB	
SiHP33N60E		E Series Power MOSFET	Vdss=600V;Rdson=0.099Ω Id=33A;Qg=150nC	TO-220AB	

High Voltage Resistor

Product Name	Status	Description	Features	Package	Q-Level
VR25		High Ohmic/High Voltage Resistors	High pulse loading capability;Small size	A5;A2;A1;R5;N4	

Ultrafast Diode

Product Name	Status	Description	Features	Package	Q-Level
VS-15ETX06-M3		High Voltage Ultrafast Rectifier	IF(av)=15A;Vrrm=600V Trr=18nS;Vf=1.5V;Tjmax=175#	TO-220AC	
VS-8ETX06-M3		High Voltage Ultrafast Rectifier	IF(av)=8A;Vrrm=600V Trr=15nS;Vf=1.4V;Tjmax=175#	TO-220AC	

SMPS Desktop Power Supply - NEW : Isolation Converter, Control Circuit

Multilayer Ceramic Chip Capacitors

Product Name	Status	Description	Features	Package	Q-Level
VJ...W1BC		Surface Mount Multilayer Ceramic Chip Capacitors	COG(NPO) :C=0.5pF to 39nF,Vr=10V to 100 V X7R:C=100 pF to 47µF,Vr=10V to 100 V	SMD	

Optocoupler

Product Name	Status	Description	Features	Package	Q-Level
VOL617A		Phototransistor Output, IF=5mA	VISO=5000VRMS Tamb: -55 to +125C CTR:50 to 600%	4 pin LSOP, mini-flat	
VOL618A		Phototransistor Output, IF=1mA	VISO=5000VRMS Tamb: -55 to +125C CTR:50 to 600%	4 pin LSOP, mini-flat	

Switch Diode

Product Name	Status	Description	Features	Package	Q-Level
1N4148WS		Small Signal Fast Switching Diodes	VRRM:100V;VR:75V IFSM:350mA IFAV:150mA;Ptot:200mW	SOD-323	

Thin Film Resistor

Product Name	Status	Description	Features	Package	Q-Level
TNPW_series		High Stability Thin Film Flat Chip Resistors	Resistance tol: +/- 1%, +/- 0.5% and +/- 0.1%	SMD	

Zener Diode

Product Name	Status	Description	Features	Package	Q-Level
PLZ_series		500mW Zener diode	V(BR) Unidirectional: 2.0 V to 39 V PD:500mW; Tj max:150 °C	DO-219AC (MicroSMF)	

SMPS Desktop Power Supply - NEW : Isolation Converter, PWM Stage

High Voltage MOSFETs

Product Name	Status	Description	Features	Package	Q-Level
SiHP21N60EF		EF Series Power MOSFET with Fast Body Diode	Vdss=600V;Rdson=0.176Ω d=4.1A;Qg=84nC	TO-220AB	
SiHP28N65EF		EF Series Power MOSFET with Fast Body Diode	Vdss=650V;Rdson=0.10Ω ;Id=28A;Qg=146nC	TO-220AB	
SiHP33N60EF		EF Series Power MOSFET with Fast Body Diode	Vdss=600V;Rdson=0.098Ω ;Id=33A;Qg=155nC	TO-220AB	

SMPS Desktop Power Supply - NEW : Isolation Converter, Snubber

Switch Diode

Product Name	Status	Description	Features	Package	Q-Level
BYV26EGP		Glass Passivated Ultrafast Rectifier	IF(AV):1.0 A;VRRM:800 V, 1000 V; IFSM:30 A;Trr:75 ns VF:1.3 V;Tj max:175 °C	DO-204AC (DO-15)	
RS1PD		High Current Density Surface Mount Glass-Passivated Fast Switching Rectifier	IF(AV):1.0 A;VRRM:100V to 600V IFSM:30 A;Trr:150nS~250nS VF:1.3 V;Tj max:150 °C	DO-220AA (SMP)	
S1M		Surface Mount Glass Passivated Rectifier	IF(AV):1.0 A;VRRM:50V to1000 V IFSM:30 A;VF:1.1 V Tj max:150 °C	DO-214AC (SMA)	

TVS Diode

Product Name	Status	Description	Features	Package	Q-Level
SMBJxD series		Surface-Mount TVS (3.5%)	V(BR) Unidirectional: 6.5V to 288V V(BR) Bidirectional: 6.5V to 145V; PPPM:600W;PD:5W;Tj max:150 °C	DO-214AA (SMB)	

Zener Diode

Product Name	Status	Description	Features	Package	Q-Level
PLZ series		500mW Zener diode	V(BR) Unidirectional: 2.0 V to 39 V PD:500mW; Tj max:150 °C	DO-219AC (MicroSMF)	