

OZP50S24SS33A

DATASHEET

Absoloute Maximum Ratings	Conditions	Minimum	Typical/Nominal	Maximum	Units
Input Voltage Continuous	Full Temperature Range	0	24	36	Vdc
Input Voltage Transient	Operating or non-Operating, 100 mS Max Duration	-	-	50	Vdc
Isolation Voltage	Input to Output Tested	-	-	2500	Vdc
Input Reverse Polarity	None, Install External Fuse	-	None	-	Vdc
Off/On Remote Control	Power On or Off, Referred to -Vin	0	-	15	Vdc
Output Power		0	-	50	W
Output Current	Current- Limited, No Damage, Short- Circuit Protected	0	-	15	A
Storage Temperature Range	Vin = Zero (No Power)	-55	-	125	°C
Input	Conditions	Minimum	Typical/Nominal	Maximum	Units
Operating Voltage Range		9	24	36	Vdc
Recommended External Fuse	Fast Blow	-	-	10	A
Start-Up Threshold	Rising Input Voltage	-	8,25	-	Vdc
UnderVoltage Shutdown	Falling Input Voltage	-	7,4	-	Vdc
OverVoltage Shutdown	Rising Input Voltage	-	None	-	Vdc
Reverse Polarity Protection	None, Install External Fuse	-	None	-	Vdc
Internal Filter Type	-	-	LC	-	
Input Current					
Full Load Conditions	Vin = Nominal	-		2,35	A
Output in Short Circuit	-	-		0,2	A
No Load Input Current	Iout = Minimum, Unit = On	-		10	mA
Shut-Down Mode Input Current (Off,UV,OT)	-	-		3	mA
Pre-biased Startup	External Output Voltage < Vset	-	-	Monotonic	-
General and Safety	Conditions	Minimum	Typical/Nominal	Maximum	Units
Efficiency	Vin = 9, Full Load	-	89,7	-	%
	Vin = 24, Full Load	-	88,6	-	%
Isolation					
Isolation Voltage, Input to Output	-	-	2500	-	Vdc
Isolation Voltage, Input to Baseplate	-	-	2200	-	Vdc
Isolation Voltage, Baseplate to Output	-	-	2200	-	Vdc
Insulation Safety Rating	-	-	Basic	-	-
Isolation Resistance	-	10	-	-	MΩ
Isolation Capacitance	-	-	-	470	pF
Safety	Certified to UL-60950-1, IEC/EN60950-1	-	Undergoing	-	-
Calculated MTBF	-	-	Undergoing	-	-

Dynamic Characteristics	Conditions	Minimum	Typical/Nominal	Maximum	Units
Fixed Switching Frequency	-	-	400	-	KHz
Power Up Startup Time	Power On to Vout Regulated	-	10	-	mS
On/ Off Startup Time	Remote On to Vout Regulated	-	10	-	mS
Dynamic Load Response	50-75-50% Load Step, Setting time to within 1% of Vout	-	200	-	µS
Dynamic Load Peak Deviation	50-75-50% Load Step, Setting time to within 1% of Vout	-	±50	-	mV
Features	Conditions	Minimum	Typical/Nominal	Maximum	Units
Positive Logic, On State	On = Pin Open or External Voltage	10	-	15	Vdc
Positive Logic, Off State	Off = Ground Pin or External Voltage	0	-	0,7	Vdc
Control Current	Open Collector/ Drain	-	1	2	mA
Output	Conditions	Minimum	Typical/Nominal	Maximum	Units
Total Output Power	-	0	50	50	W
Voltage					
Nominal Output Voltage	No Trim	3,285	3,3	3,31	Vdc
Output Voltage Range	User- Adjustable	-14	-	10	%Of Vnom
Overvoltage Protection	-	4	4,5	5	Vdc
Current					
Output Current Range	Vin = 9-36V		-	15	A
Minimum Load	-	-	No Minimum Load	-	-
Current Limit Inception	-	16,5	22,5	24,5	A
Short Circuit					
Short Circuit Current	Hiccup Technique, Autorecovery within 1% of Vout	-	0,5	-	A
Short Circuit Duration	Output Shorted to Ground, No Damage	-	Continuous	-	-
Short Circuit Protection Method	Current Limiting	-	-	-	-
Regulation					
Line Regulation	Vin = Min to Max, Vout = Nom, Full Load	-	±0.05	-	%
Load Regulation	Iout = Min to Max, Vin = 24V	-	±0.25	-	%
Ripple and Noise	With a 1µF Output Caps in Vin = 24V and Full Load	-	45	-	mV pk-pk
Maximum Capacitive Load	Constant Resistance Mode, Low ESR	0	10000	-	µF
Mechanical	Conditions	Minimum	Typical/Nominal	Maximum	Units
Outline Dimentions	L x W x H	-	52 x 27 x 8.8	-	mm
		-	2,04 x 1.06 x 0.34	-	Inches
Weight	-	-	30	-	Grams
Through Hole Pin Diameter	-	-	1,09	-	mm
Through Hole Pin Material	-	Brass Alloy & Gold Contact Finish (0.25)			µm
EMI/RFI Shielding	-		None		-
Enviromental	Conditions	Minimum	Typical/Nominal	Maximum	Units
Operating Ambient Temperature Range	-	-40	-	85	°C
Operating Case Temperature Range	-	-40	-	105	°C
Storage Temperature	Vin = Zero (No Power)	-55	-	125	°C
Thermal Protection/ Shutdown	-	-	155	-	°C
Electromagnetic Interference	External Filter is Required	-	-	-	-
Conducted EN55022/CISPR22	-	-	Undergoing	-	-
RoHS Rating	-	-	Undergoing	-	-