



Specification Comparison

Vishay Siliconix

Si7336ADP vs. Si7336DP

Description: N-Channel MOSFET
Package: PowerPAK® S0-8
Pin Out: Identical

Part Number Replacements:

Si7336ADP-T1 Replaces Si7336DP-T1
 Lead (Pb)-Free: Si7336ADP-T1—E3 Replaces Si7336DP-T1—E3

Summary of Performance:

The Si7336ADP is the recommended replacement for the original Si7336DP. The Si7336ADP has lower on-resistance, otherwise, both part numbers perform identically.

ABSOLUTE MAXIMUM RATINGS (T _A = 25 °C UNLESS OTHERWISE NOTED)				
Parameter	Symbol	Si7336ADP	Si7336DP	Unit
Drain-Source Voltage	V _{DS}	30	30	V
Gate-Source Voltage	V _{GS}	±20	±20	
Continuous Drain Current*	T _A = 25 °C	I _D	18	A
	T _A = 70 °C	I _D	15	
Pulsed Drain Current	I _{DM}	70	70	
Continuous Source Current* (MOSFET Diode Conduction)	I _S	1.8	1.8	
Avalanche Current	L = 1.0 mH	I _{AS}	50	NS**
Power Dissipation	T _A = 25 °C	P _D	1.9	W
	T _A = 70 °C		1.2	
Operating Junction and Storage Temperature Range	T _j and T _{stg}	-55 to 150	-55 to 150	°C
Maximum Junction-to-Ambient*	R _{thJA}	65	65	°C/W
Maximum Junction-to-Case (Drain)*	R _{thJA}	1.5	1.5	

Note: * Indicates Steady State, all others are independent of time.
 ** NS denotes parameter not specified in original data sheet.

SPECIFICATIONS (T _J = 25 °C UNLESS OTHERWISE NOTED)								
Parameter	Symbol	Si7336ADP			Si7336DP			Unit
		Min	Typ	Max	Min	Typ	Max	
Static								
Gate-Threshold Voltage	V _{GS(th)}	1.0		3.0	1.0		3.0	V
Gate-Body Leakage	I _{GSS}			±100			±100	nA
Zero Gate Voltage Drain Current	I _{DSS}			1			1	µA
On-State Drain Current	V _{GS} = 10 V I _{D(on)}	30			30			A
Drain-Source On-Resistance	V _{GS} = 10 V	r _{DS(on)}	0.0024	0.0030	0.0026	0.00325	0.0042	Ω
	V _{GS} = 4.5 V		0.0031	0.0040				
Forward Transconductance	g _{fs}		110		110			S
Diode Forward Voltage	V _{SD}		0.72	1.1		0.72	1.1	V
Dynamic								
Total Gate Charge	Q _g		36	50		36	50	nC
Gate-Source Charge	Q _{gs}		18			18		
Gate-Drain Charge	Q _{gd}		10			10		
Gate Resistance	R _g	0.8	1.3	2.0	0.8	1.3	2.0	Ω
Input Capacitance	C _{iss}		5600			5600		pF
Output Capacitance	C _{oss}		860			860		
Reverse Transfer Capacitance	C _{rss}		415			415		



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SPECIFICATIONS (T _J = 25 °C UNLESS OTHERWISE NOTED)								
Parameter	Symbol	Si7336ADP			Si7336DP			Unit
		Min	Typ	Max	Min	Typ	Max	
Switching								
Turn-On Time	t _{d(on)}		24	35		24	35	ns
	t _r		16	25		16	25	
Turn-Off Time	t _{d(off)}		90	140		90	140	
	t _f		32	50		32	50	
Source-Drain Reverse Recovery Time	t _{rr}		45	70		45	70	