

P-Channel MOSFET

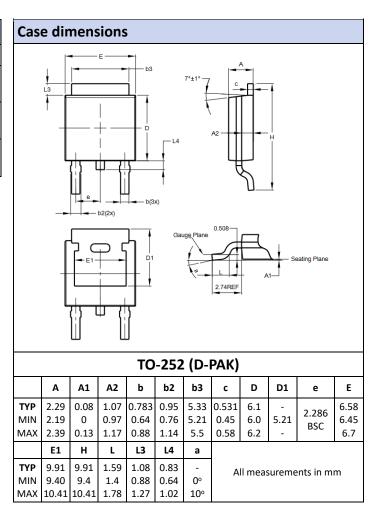
Primary characteristics				
Symbol	Parameter	Value	Unit	
I _D	Continuous drain current	50	Α	
V _{DS}	Drain source voltage	40	V	
R _{DSON} - typ(@V _{GS} =4.5V)	Static drain-source on-resistance	<20 Typ. 14	mΩ	

Features

- TO-252 (D-PAK) case for easy automatic insertion
- Pb-free and RoHS compliant
- Low gate charge minimize switching loss
- Fast recovery body diode

Application

- Adaptor
- TV main power
- SMPS power supply
- LCD panel power



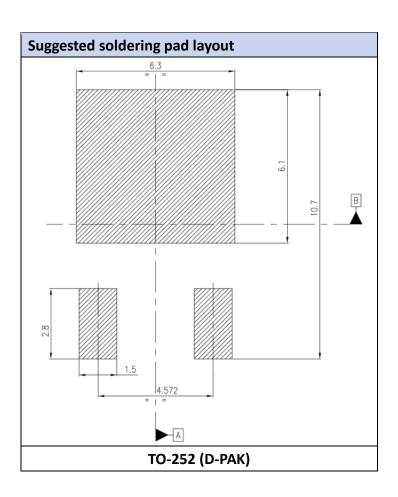
Maximum and thermal ratings (T _C = 25°C unless otherwise specified)				
Characteristics	Symbol	Value	Unit	
Drain-source voltage	V _{DSS}	40	V	
Gate-source voltage	V _{GSS}	±20	V	
Continuous drain current @T _C =25°C	ID	50	А	
Pulsed drain current @V _{GS} =10V	I _{DM} ¹⁾	102	А	
Operating junction temperature range	T _J , T _{STG}	-55 ~ 150	°C	
Thermal resistance junction-case	ReJC	2.1	°C/W	



Characteristics ²⁾	Test condition	Symbol	Value			
			Min.	Тур.	Max.	Unit
	OFF characteristics	•				
Drain-to-source breakdown voltage	V _{GS} =0V, I _D =250yA	BV _{DSS}	40	-	-	V
Zero gate voltage drain current	V _{DS} =32V, V _{GS} =0V		-	-	1	ųА
	V _{DS} =32V, V _{GS} =0V, T _J =85°C	I _{DSS}	-	-	30	
Gate leakage current	V _{GS} =±20V, V _{DS} =0V	I _{GSS}	-	-	±100	nA
	ON characteristics					
During and the special section of the section of th	V _{GS} =10V, I _D =1.0A	D	-	10	15	mΩ
Drain-source on-state resistance	V _{GS} =4.5V, I _D =1.0A	KDS(ON)	R _{DS(ON)} -	14	20	
Gate threshold voltage	V _{DS} =V _{GS} , I _D =250yA	V _{GS(TH)}	1.0	1.4	2.0	V
	Source-drain body diode characte	eristics				
Diode forward voltage	I _{SD} =1.0A, V _{GS} =0V	V _{SD}	_	0.7	1.1	V

Ordering information				
Part Number	Package	Shipping Quantity	Dimensions	
AKS50P04	TO-252 (D-PAK)	2500 pcs / reel		





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