





# YJS05GP10A

## Electrical Characteristics (T<sub>J</sub>=25 unless otherwise noted)

Parameter	Symbol	Conditions	Min	Typ	Max	Units
<b>Static Parameter</b>						
Drain-Source Breakdown Voltage	BV <sub>DSS</sub>	V <sub>GS</sub> = 0V, I <sub>D</sub> =-250	-100			V
Zero Gate Voltage Drain Current	I <sub>DSS</sub>	V <sub>DS</sub> =-100V, V <sub>GS</sub> =0V	T <sub>J</sub> =25		-1	
			T <sub>J</sub> =150		-100	
Gate-Body Leakage Current	I <sub>GSS</sub>	V <sub>GS</sub> = ± 20V, V <sub>DS</sub> =0V			± 100	nA
Gate Threshold Voltage	V <sub>GS(th)</sub>	V <sub>DS</sub> = V <sub>GS</sub> , I <sub>D</sub> =-250	-1.0	-1.8	-2.5	V
Static Drain-Source On-Resistance	R <sub>DS(ON)</sub>	V <sub>GS</sub> = -10V, I <sub>D</sub> =-3A		83	110	m
		V <sub>GS</sub> = -4.5V, I <sub>D</sub> =-2A		95	120	
Diode Forward Voltage	V <sub>SD</sub>	I <sub>S</sub> =-3A, V <sub>GS</sub> =0V			-1.3	V
Maximum Body-Diode Continuous Current	I <sub>S</sub>				-4.5	A
<b>Dynamic Parameters</b>						
Input Capacitance	C <sub>iss</sub>	V <sub>DS</sub> =-50V, V <sub>GS</sub> =0V, f=1MHZ		1051		pF
Output Capacitance	C <sub>oss</sub>			119		
Reverse Transfer Capacitance	C <sub>rss</sub>			25		
<b>Switching Parameters</b>						
Total Gate Charge	Q <sub>g(-10V)</sub>	V <sub>GS</sub> =-10V, V <sub>DS</sub> =-50V, I <sub>D</sub> =-5A		20		nC
Total Gate Charge	Q <sub>g(-4.5V)</sub>			9.7		
Gate-Source Charge	Q <sub>gs</sub>			3.9		
Gate-Drain Charge	Q <sub>gd</sub>			4.3		
Reverse Recovery Chrage	Q <sub>rr</sub>	I <sub>F</sub> =-5A, di/dt=100A/us		140		
Reverse Recovery Time	t <sub>rr</sub>			80		

ns

**YJS05GP10A**



Figure7. Drain current



SOP-8 Package Information

SYMBOL	MIN.		
	0.053	0.069	
B	0.004	0.010	
		0.061	
D		0.020	
E			
F			
G	0.050BSC		1.270BSC
H			
J			
K			



# YJS05GP10A

---

## Disclaimer

The information presented in this document is for reference only. Yangzhou Yangjie Electronic Technology Co., Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Yangjie or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

This publication supersedes & replaces all information previously supplied. For additional information, please visit our website [http:// www.21yangjie.com](http://www.21yangjie.com)