

NDS9953A

Dual P-Channel Enhancement Mode Field Effect Transistor

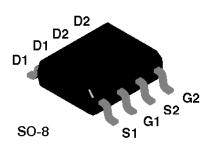
General Description

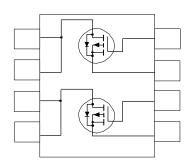
Features

Ω

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Absolute Maximum Ratings

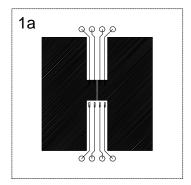
Parameter	NDS9953A	Units
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	±	
	±	
		۰
L CHARACTERISTICS		
		٥
		0
		± ± ±

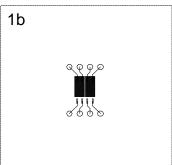
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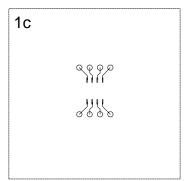
Electrical Characteristics •		
Symbol Parameter	Conditions	Min Typ Max Units
OFF CHARACTERISTICS		
	gs µ	
	DS GS	μ
	J	μ
	GS DS	
	GS DS	
ON CHARACTERISTICS		
	DS GS D μ	
	J	
	GS D	Ω
	J	
	GS D	
	J	
	J	

Electrical Characteristics °									
Symbol	Parameter	Condition	ns			Min	Тур	Max	Units
DRAIN-SOURCE DIODE CHARACTERISTICS AND MAXIMUM RATINGS									
		GS	s						
					μ				

 $P_D(t) = \frac{\frac{0}{R_{\theta J} \int_{A}^{t} I}}{R_{\theta J} \int_{A}^{t} I} = \frac{\frac{T_J - T_A}{R_{\theta J} \int_{C}^{t} R_{\theta C}(A)}}{R_{\theta J} \int_{C}^{t} R_{\theta C}(A)} = I_D(t) \times R_{DS(ON) | \theta T_J}$







Typical Electrical Characteristics

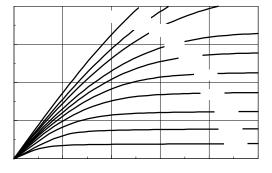


Figure 1. On-Region Characteristics.

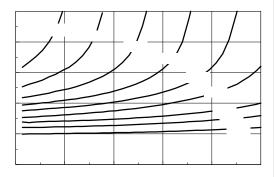


Figure 2. On-Resistance Variation with Gate Voltage and Drain Current.

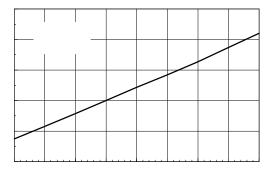


Figure 3. On-Resistance Variation with Temperature.

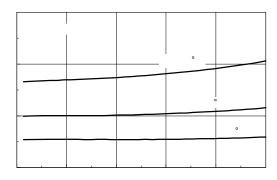


Figure 4. On-Resistance Variation with Drain Current and Temperature.

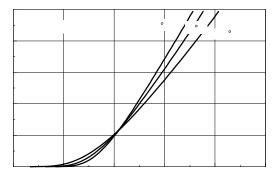


Figure 5. Transfer Characteristics.

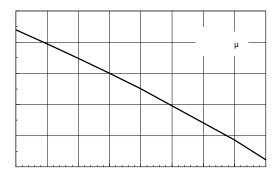


Figure 6. Gate Threshold Variation with Temperature.

Typical Electrical Characteristics (continued)

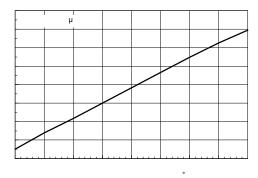


Figure 7. Breakdown Voltage Variation with Temperature.

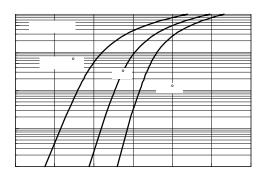


Figure 8. Body Diode Forward Voltage
Variation with Current and Temperature

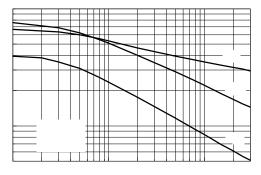


Figure 9. Capacitance Characteristics.

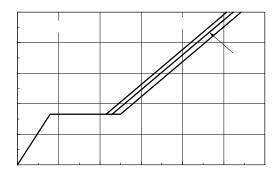


Figure 10. Gate Charge Characteristic.

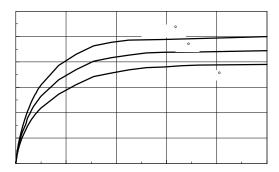


Figure 11. Transconductance Variation with Drain Current and Temperature.

Typical Thermal Characteristics

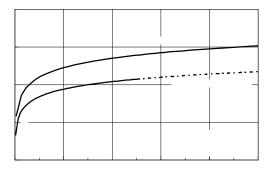


Figure 12. SO-8 Dual Package Maximum Steady-State Power Dissipation versus Copper Mounting Pad Area.

Figure 13. Maximum Steady-State Drain Current versus Copper Mounting Pad Area.

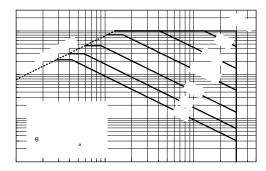


Figure 14. Maximum Safe Operating Area.

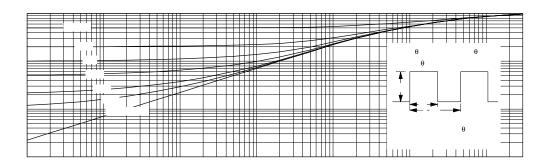


Figure 15. Transient Thermal Response Curve

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