HTO350N03

30V N-Ch Power MOSFET

DS			
DS(on),typ	GS		Ω
D (Sillicon Limited)		5.5	

Feature

◇ High Speed Power Switching, Logic Level

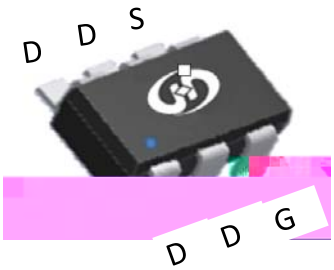
◇ Lead Free, Halogen Free

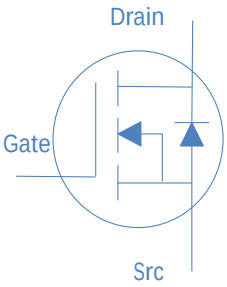
Application

◇ Hard Switching and High Speed Circuit

◇ DC/DC in Telecoms and Inductrial

TSOP-6





Part Number	Package	Marking
HTO350N03	TSOP-6	

=25 (unless otherwise specified)

Parameter	Symbol	Conditions		
Continuous Drain Current (Silicon Limited)		=25	5.5	
		=70	3.6	
Drain to Source Voltage	DS			
Gate to Source Voltage	GS			
Pulsed Drain Current				
Power Dissipation		=25	1.25	W
Operating and Storage Temperature	J, T			

Parameter	Symbol		
Thermal Resistance Junction-Ambient	θJA		/W

Electrical Characteristics at T =25 (unless otherwise specified)

Static Characteristics

Parameter	Symbol	Conditions		typ		
Drain to Source Breakdown Voltage	(BR)DSS	GS=0V, I μ				
Gate Threshold Voltage	GS(th)	GS DS, I μ	1.0	1.50	3.0	
Zero Gate Voltage Drain Current	DSS	GS=0V, V_{DS}=24V, T =25 GS=0V, V_{DS}=20V, T =125				μ
Gate to Source Leakage Current	GSS	GS=±20V, V_{DS}				
Drain to Source on Resistance	DS(on)	GS=10V, I =5.5A GS=4.5V, I =4.5A				Ω
Transconductance	fs	DS=5V, I =5.5A				S
Input Capacitance Output Capacitance		GS=0V, V_{DS}=10V, f=1MHz		75		pF
Reverse Transfer Capacitance	rss			7.1		
		=10V, I =5.5A, V_{GS}				
Gate to Drain (Miller) Charge	gd			2.2		
Turn on Delay Time	d(on)					
		=15V, I				

Reverse Diode Characteristics

Diode Forward Voltage	SD	GS=0V, I_F			1.2	

Fig 1. Typical Output Characteristics

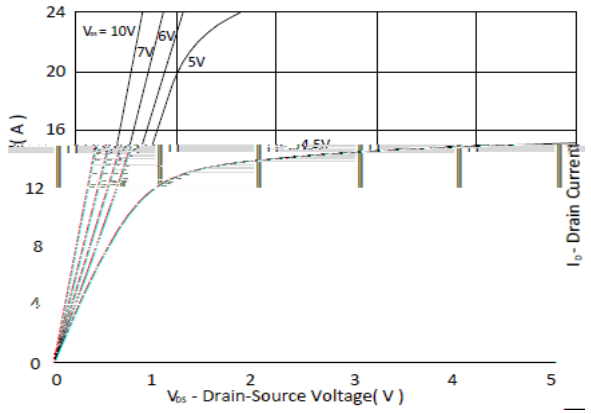


Figure 2. On-Resistance vs. Gate-Source Voltage

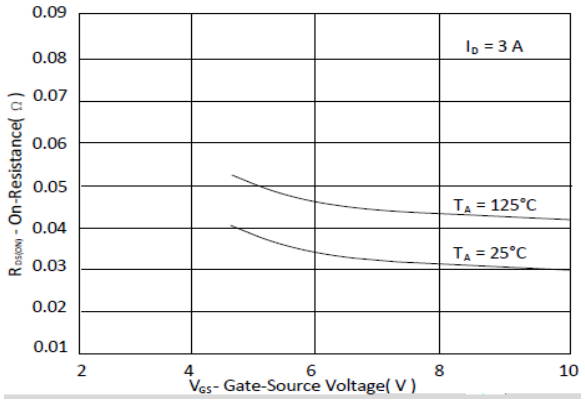


Figure 3. On-Resistance vs. Drain Current and Gate Voltage

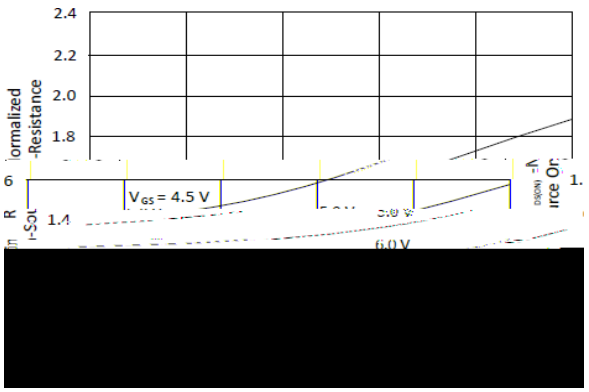


Figure 4. Normalized On-Resistance vs. Junction Temperature

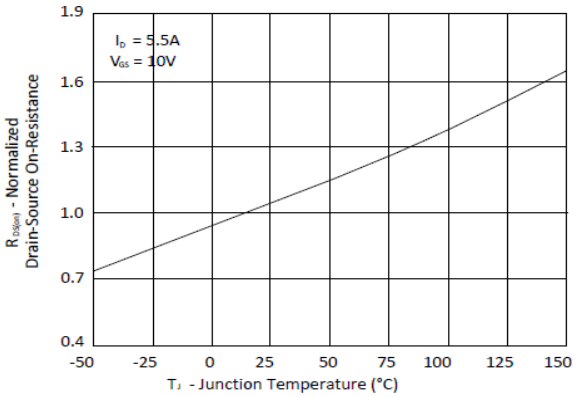


Figure 5. Typical Transfer Characteristics

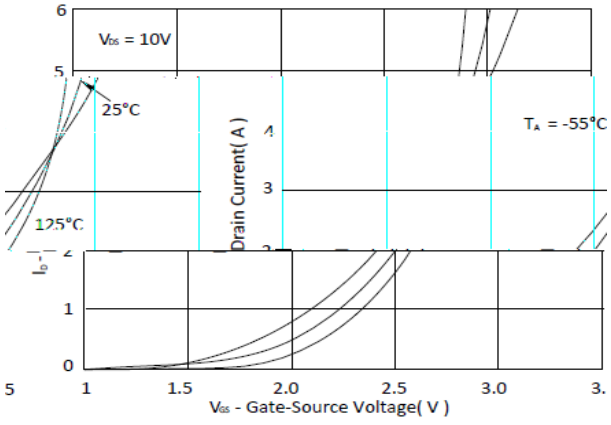


Figure 6. Typical Source-Drain Diode Forward Voltage

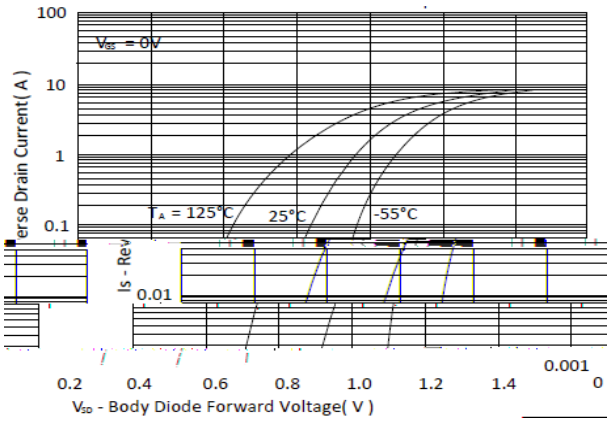
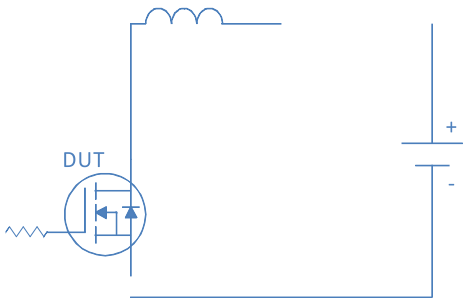


Figure 9. Maximum Safe Operating Area

Inductive switching Test	

Gate Charge Test	

Uclamped Inductive Switching (UIS) Test	
	

Diode Recovery Test	

Package Ou

TSOP-6, 6leads