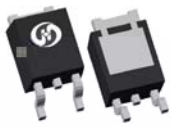
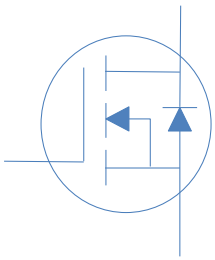
HTD058N03R

30V N-Ch Power MOSFET

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





Part Number	Package	Marking
HTD058N03R	TO-252	TD058N03R

=25 (unless otherwise specified)

Parameter	Symbol	Conditions		
Continuous Drain Current (Silicon Limited)		=25		
		=100		
Continuous Drain Current (Package Limited)		=25		
Drain to Source Voltage	DS			
Gate to Source Voltage	GS			
Pulsed Drain Current				
Avalanche Energy, Single Pulse	E_{AS}	L=0.1mH, T =25		
Power Dissipation		=25		
Operating and Storage Temperature	, T			

Parameter	Symbol		
Thermal Resistance Junction-Case			/W
Thermal Resistance Junction-Ambient			/W

Fig 1. Typical Output Characteristics

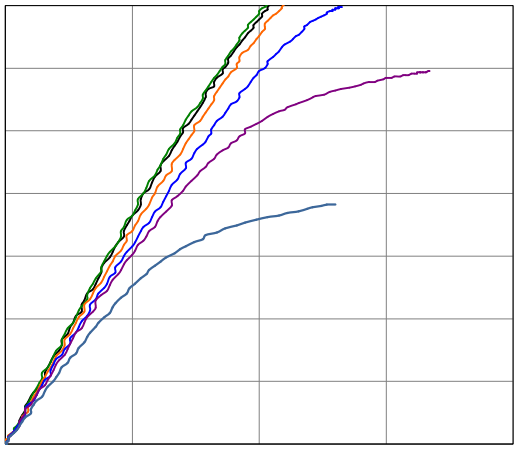


Figure 2. On-Resistance vs. Gate-Source Voltage

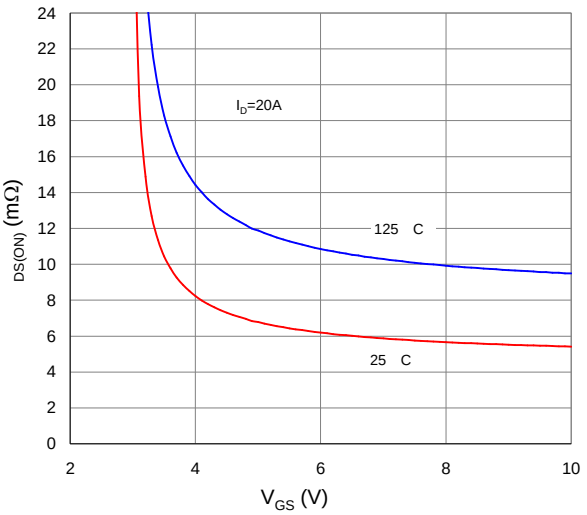


Figure 3. On-Resistance vs. Drain Current and Gate Voltage

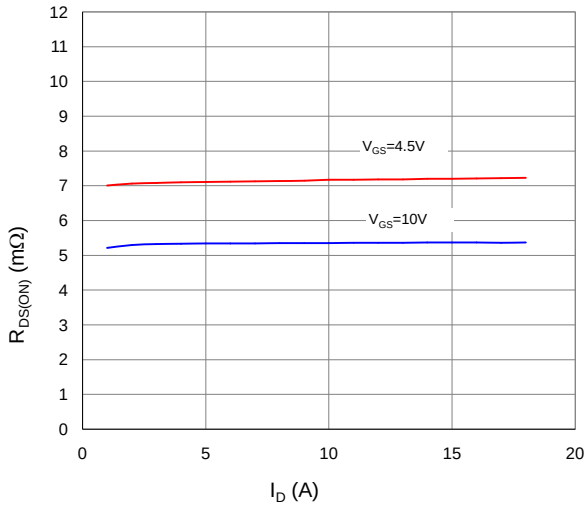


Figure 4. Normalized On-Resistance vs. Junction Temperature

Figure 5. Typical Transfer Characteristics

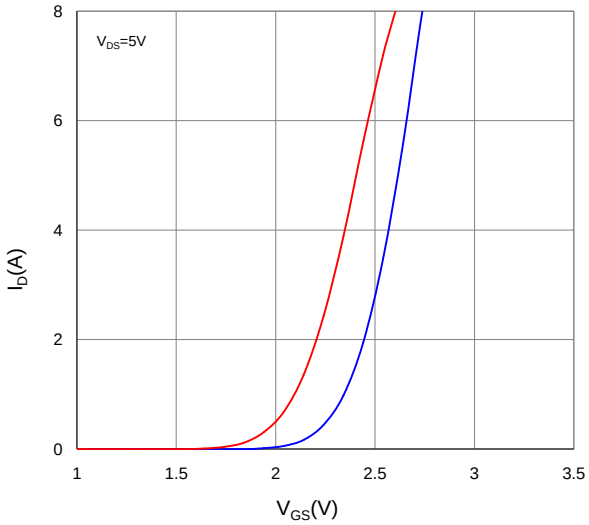


Figure 6. Typical Source-Drain Diode Forward Voltage

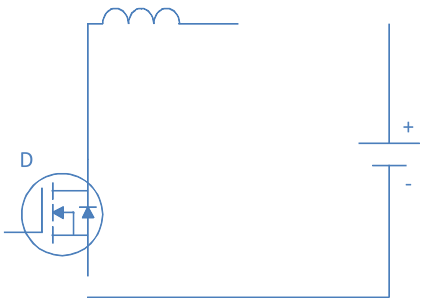
Figure 7. Typical Gate-Charge vs. Gate-to-Source Voltage	Figure 8. Typical Capacitance vs. Drain-to-Source Voltage

Figure 9. Maximum Safe Operating Area	Figure 10. Maximun Drain Current vs. Case Temperature

Figure 11. Normalized Maximum Transient Thermal Impedance, Junction-to-Case

Inductive switching Test	

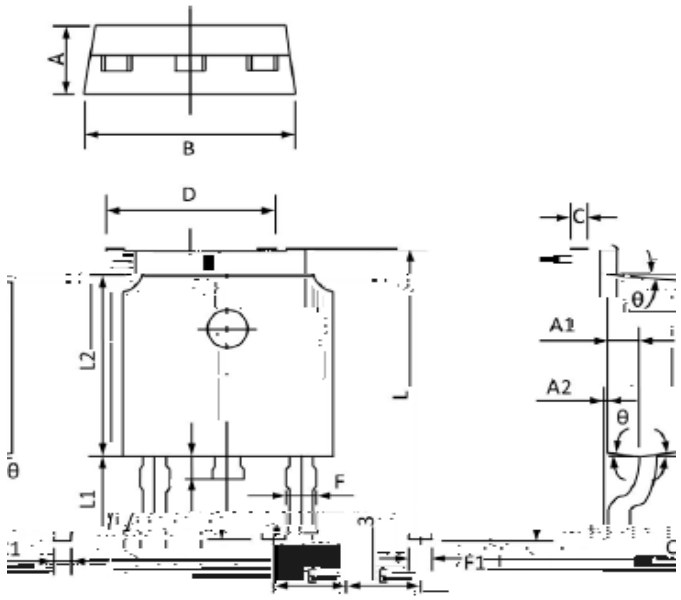
Gate Charge Test	

Uclamped Inductive Switching (UIS) Test	
	

Diode Recovery Test	

Package Outline

TO-252 2 leads



Symbol		Dimensions In Millimeters		Dimensions In Inches	
		Min	Max	Min	Max
4	A	2.20	2.40	0.087	0.09
4	A1	0.91	1.11	0.036	0.04
6	A2	0.00	0.15	0.000	0.00
4	B	6.50	6.70	0.256	0.26
0	C	0.46	0.580	0.018	0.23
0	C1	0.46	0.580	0.018	0.03
.5	D	5.10	5.46	0.201	0.21
4	E	2.186	2.386	0.086	0.09
7	F	0.74	0.94	0.029	0.03
4	F1	0.660	0.860	0.026	0.03
9	L	9.80	10.40	0.386	0.40
		6.240	6.350	0.248	0.252
		1.000	0.0024	0.0039	1.52
		0°	5°	9°	3°