100V P-Ch Power MOSFET

V_{DS}		-100	V
$R_{DS(on),typ}$	V_{GS}=-10V	182	m :
$R_{DS(on),typ}$	V_{GS}=-7V	190	m :
$I_{D\ (Sillicon\ Limited)}$		-10	A

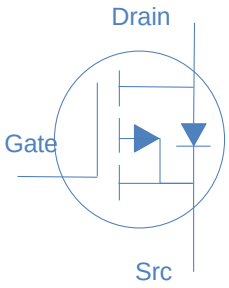
Feature

- High Speed Power Switching, Logic Level
- Enhanced Avalanche Ruggedness
- 100% UIS Tested, 100% Rg Tested
- Lead Free, Halogen Free

Application

- Load Switches
- Hard Switching and High Speed Circuit
- BLDC Motor

TO-252



Part Number	Package	Marking
HTD2K1P10	TO-252	TD2K1P10

Absolute Maximum Ratings at T_j X Q O H V V R W K H U Z L V H V S H F L I L H G

Parameter	Symbol	Conditions	Value	Unit
Continuous Drain Current (Silicon Limited)	I_D	T_C	-10	A
		T_C	-7	
Drain to Source Voltage	V_{DS}	-	-100	V
Gate to Source Voltage	V_{GS}	-	±20	V
Pulsed Drain Current	I_{DM}	-	-40	A
Avalanche Energy, Single Pulse	E_{AS}	L=0.1mH, T_C	7.2	mJ
Power Dissipation	P_D	T_C	29	:
Operating and Storage Temperature	T_J, T_{stg}	-	-55 to 150	

Absolute Maximum Ratings

Parameter	Symbol	Max	Unit
7 K H U P D O 5 H V L V W D Q F H - X Q F W L R Q $ P E L H Q W W 7	$R_{\theta JA}$	V 62.5	:
Thermal Resistance Junction-Case	$R_{\theta JC}$	4.3	:

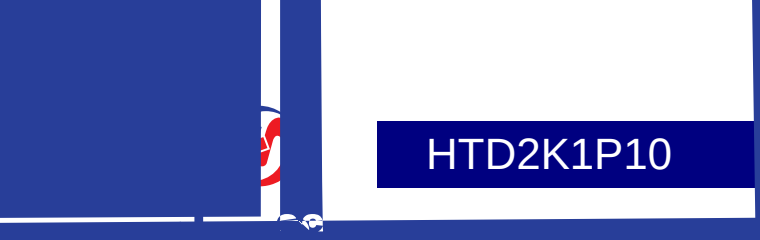
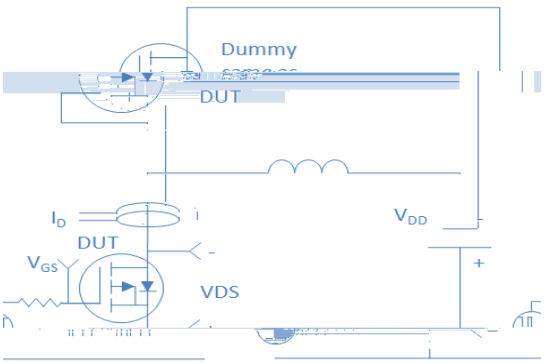

HTD2K1P10

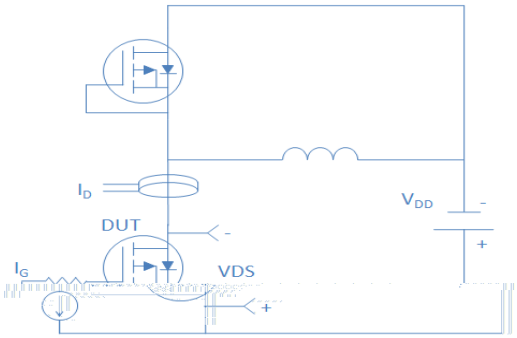
Figure 3. On-Resistance vs. Drain Current and Gate Voltage

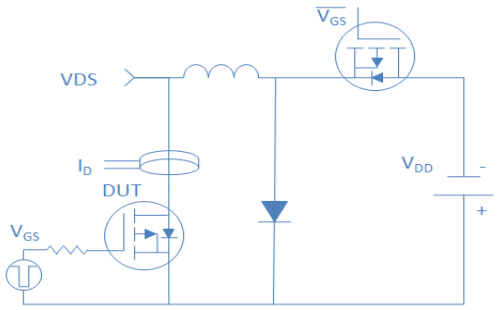
Figure 7. Typical Gate-Charge vs. Gate-to-Source Voltage	Figure 8. Typical Capacitance vs. Drain-to-Source Voltage

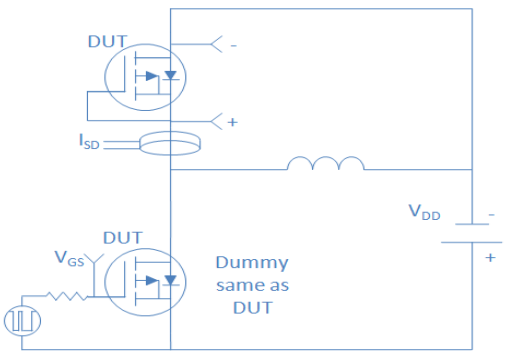
)LJXUH 0D[LPXP 6DIH 2SHUDWLQJ $UHD	Figure 10. Single Pulse Maximum Power Dissipation

)LJXUH 1RUPDOL]HG 0D[LPXP 7UDQVLHQW 7KHUPDO ,PSHGDQFH -XQFWLRQ

Inductive switching Test	
	

Gate Charge Test	
	

Uclamped Inductive Switching (UIS) Test	
	

Diode Recovery Test	
	

Package Outline

TO-252, 3leads