

$r_{DS(on)}$ (at $V_{GS}=2.5V$ )	11 mohm
$r_{DS(on)}$ (at $V_{GS}=1.8V$ )	15 mohm
	20 mohm

**General Description**

Trench Power LV MOSFET technology

Halogen Free

**Applications**DC-DC Converters  
Power management functions**Absolute Maximum Ratings** ( $T_A=25$  unless otherwise noted)

Parameter	Symbol	Limit	Unit
Drain-source Voltage	V		

A	$I_{DM}$	43	A
Total Power Dissipation	$T_A=25$	1.5	W
	$T_C=25$	4.0	W
Thermal Resistance Junction-to-Ambient <sup>B</sup>	$R_{JA}$	83	/W
Thermal Resistance Junction-to-Case	$R_{JC}$	31	/W
Junction and Storage Temperature Range	$T_J, T_{STG}$	-55 +150	

**Ordering Information** (Example)

PREFERRED P/N	PACKING CODE	Marking	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
YJH10N02A	F1	2010	1000	10000	40000	7" reel
	F2	2010	1000	8000	32000	7" reel





Typical Performance Characteristics

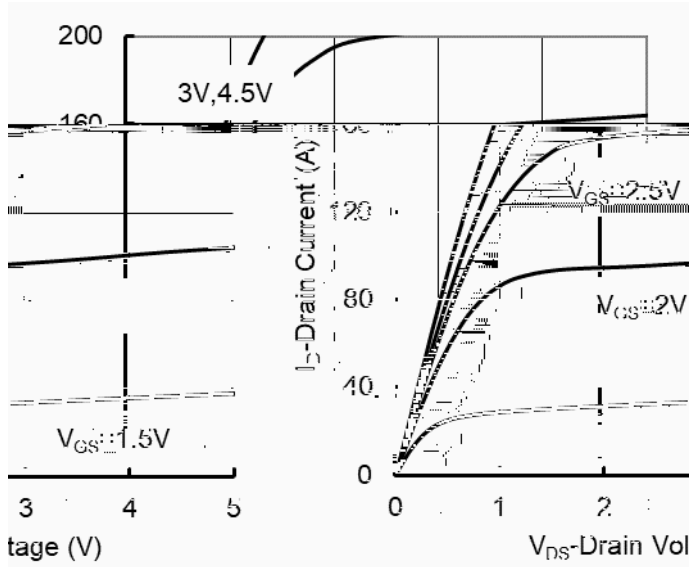


Figure1. Output Characteristics

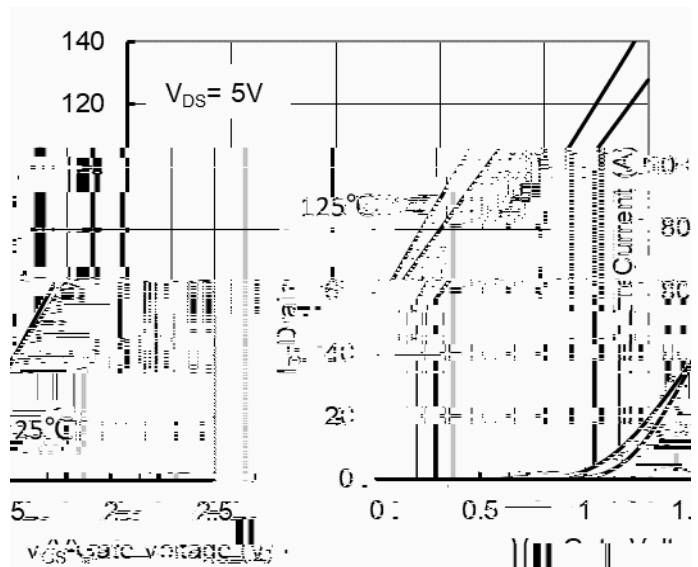


Figure2. Transfer Characteristics

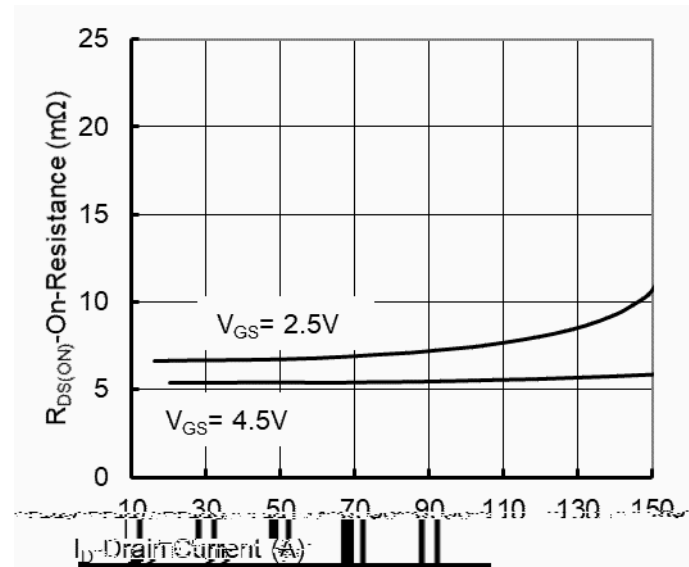


Figure3. On-Resistance vs. Drain Current

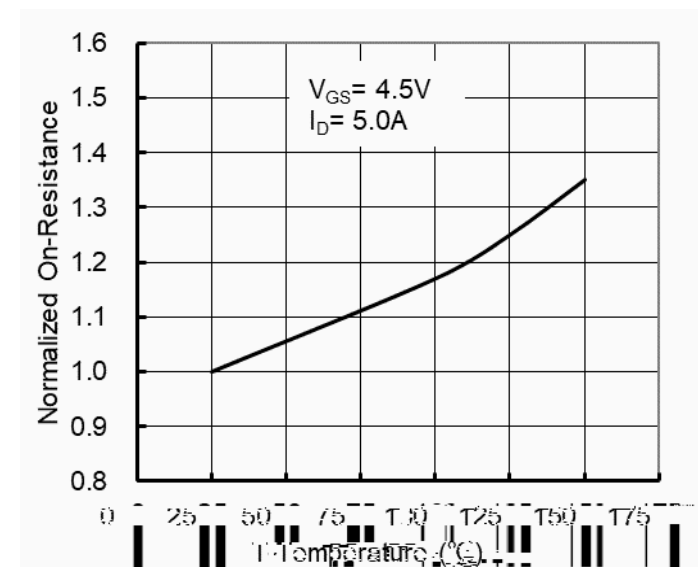


Figure4. On-Resistance vs. Junction Temperature

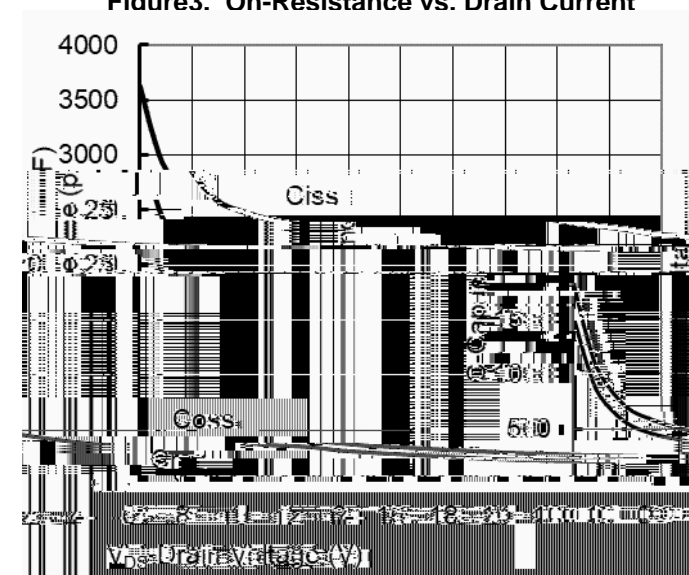


Figure5. Capacitance Characteristics

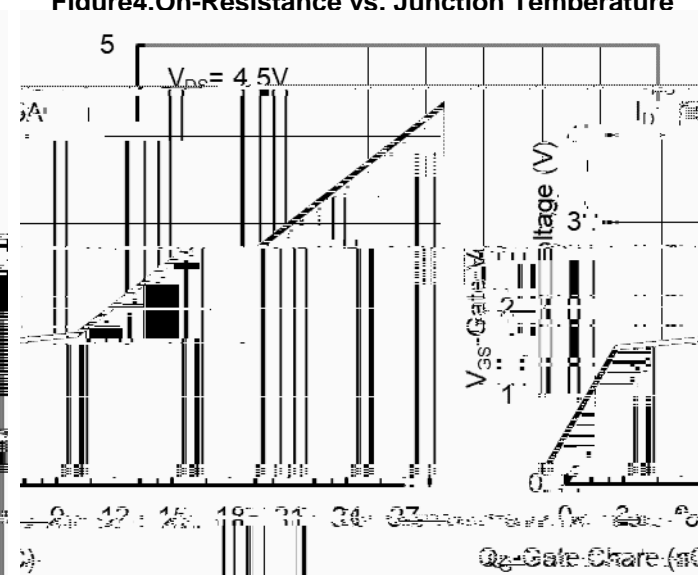
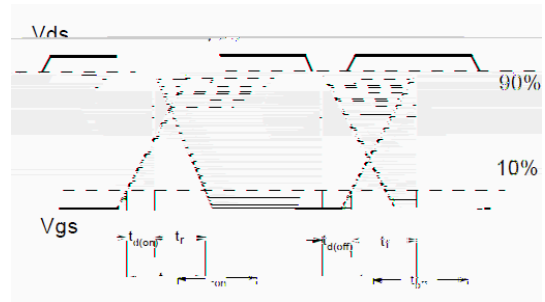
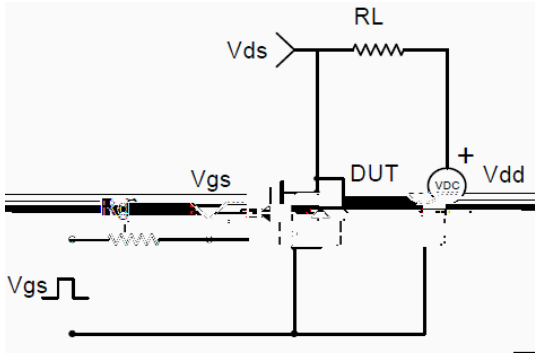


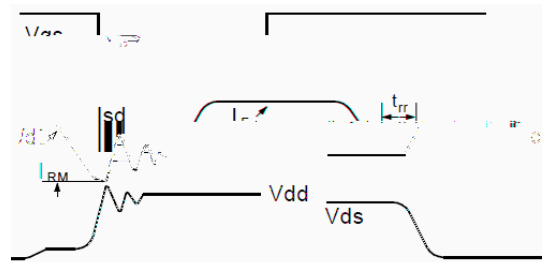
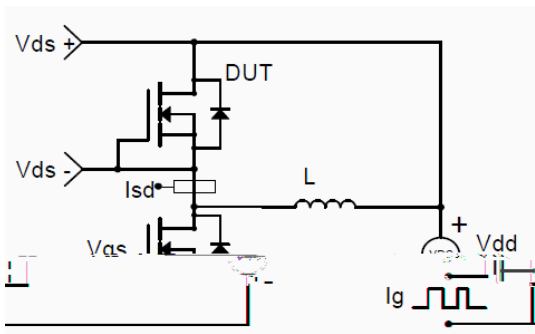
Figure6. Gate Charge

)LJXUH 6DIH 2SHUDWLRQ \$UHQD[LJXUH 0D[LPXP &RQWLQXRXV 'U  
QW YV \$PELHQW 7HPSHUDWXU

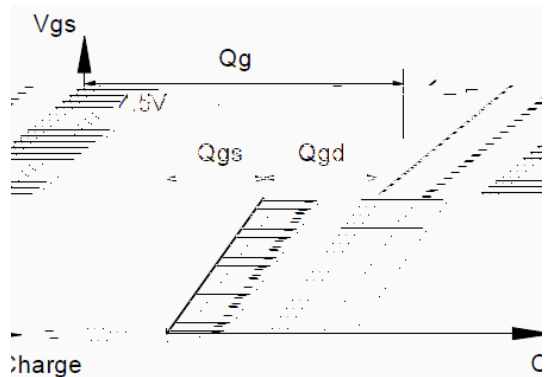
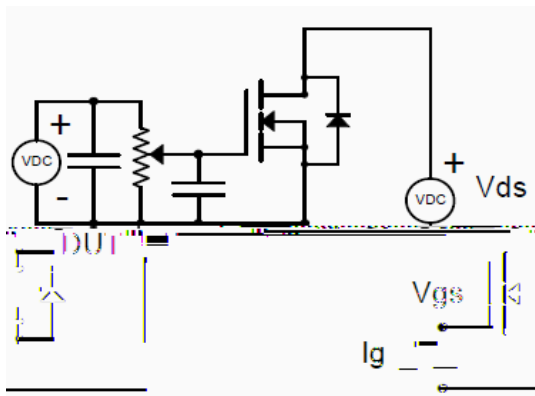
)LJXUH 1RUPDOLJHUQD[LHQW 7KHUPDO ,PSHGDQFH



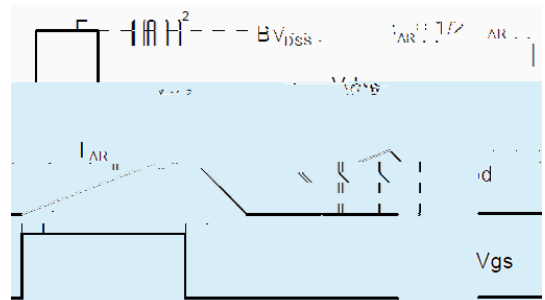
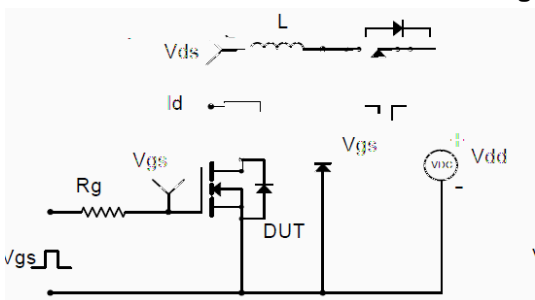
**Resistive Switching Test Circuit & Waveforms**



**Diode Recovery Test Circuit & Waveforms**



**Gate Charge Test Circuit & Waveform**



**Unclamped Inductive Switching (UIS) Test Circuit & Waveforms**





## YJH10N02A

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