



### P-Channel Enhancement Mode F



$r_{DS(ON)}$ ( at  $V_{GS} 1 - ( . ) V$  )      850 mohm  
 $R_{DS(ON)}$ ( at  $V_{GS}=-2.5V$  )      1200 mohm  
 $R_{DS(ON)}$ ( at  $V_{GS}=-1.8V$  )      2000 mohm  
 ESD Protected Up to 2.0KV (HBM)

#### General Description

Trench Power LV MOSFET technology  
 High Density Cell Design for Low  $R_{DS(ON)}$   
 High Speed switching

#### Applications

Interfacing, Logic switch  
 Load switch  
 Power management

#### Absolute Maximum Ratings ( $T_A=25$ unless otherwise noted)

Parameter	Symbol	Maximum	Unit
Drain-source Voltage	$V_{DS}$	-20	V
Gate-source Voltage	$V_{GS}$	± 12	V
Drain Current	$I_D$	$T_A=25$ Steady State	-0.5
		$T_A=70$ Steady State	-0.4
Pulsed Drain Current <sup>A</sup>	$I_{DM}$	-2.6	A
Total Power Dissipation @ $T_A=25$ Steady State	$P_D$	0.35	W
Thermal Resistance Junction-to-Ambient @ Steady State <sup>B</sup>	$R_{JA}$	357	/ W
Junction and Storage Temperature Range	$T_J, T_{STG}$	-55 +150	

					E I 5 B H = H M f	8 9 @ = J 9 F M A C 8 9
YJL3139KA	F2	39KA.	3000	30000	120000	7" reel





Typical Performance Characteristics

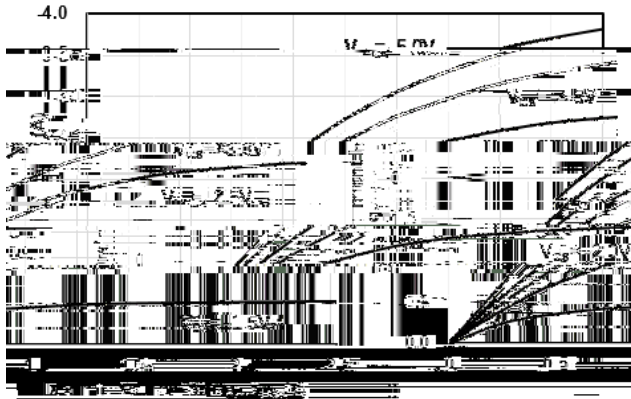


Figure1. Output Characteristics

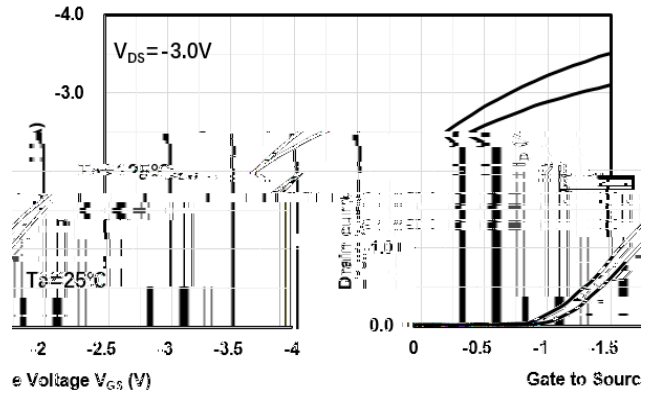


Figure2. Transfer Characteristics

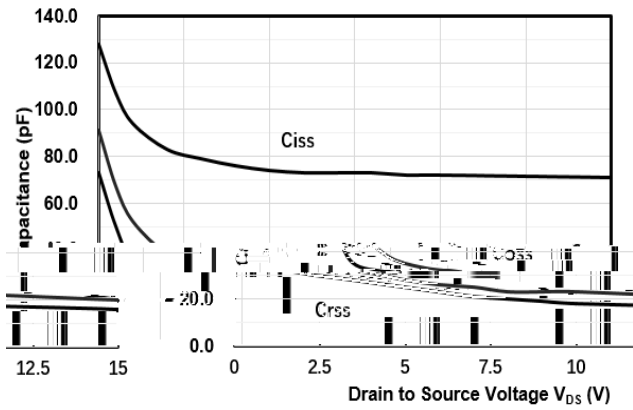


Figure3. Capacitance Characteristics

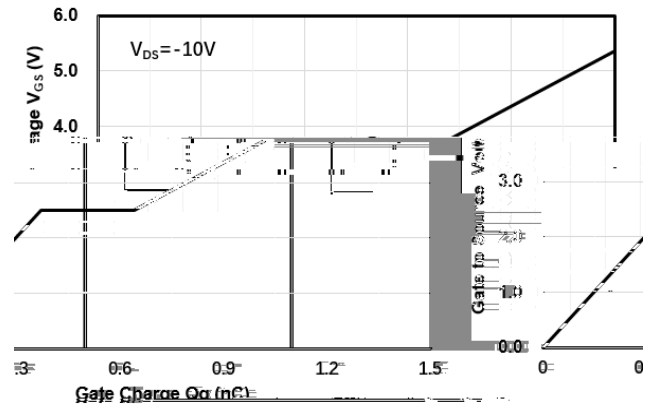


Figure4. Gate Charge

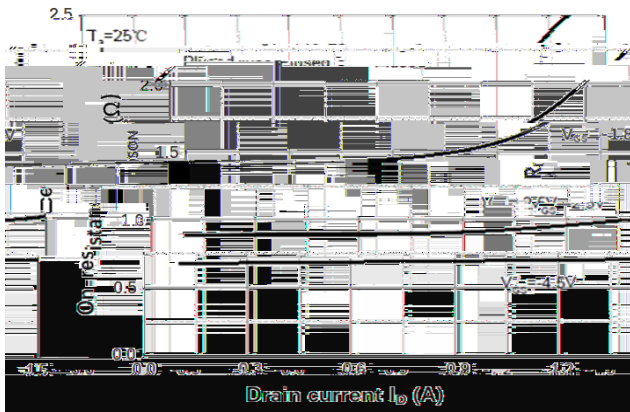


Figure5. Drain-Source on Resistance

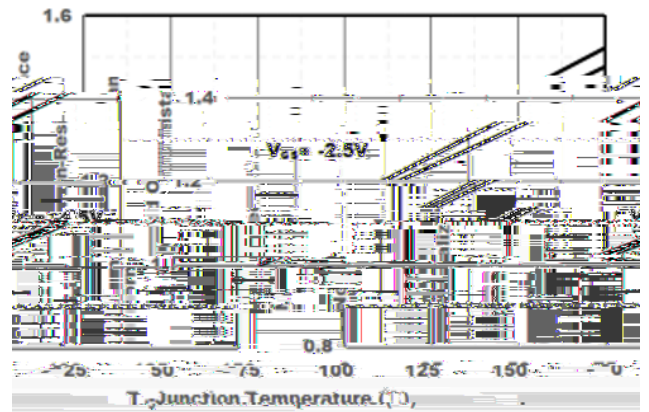


Figure6. Drain-Source on Resistance

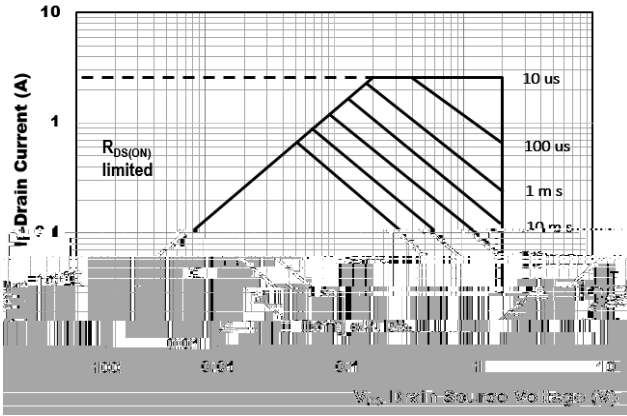


Figure7. Safe Operation Area

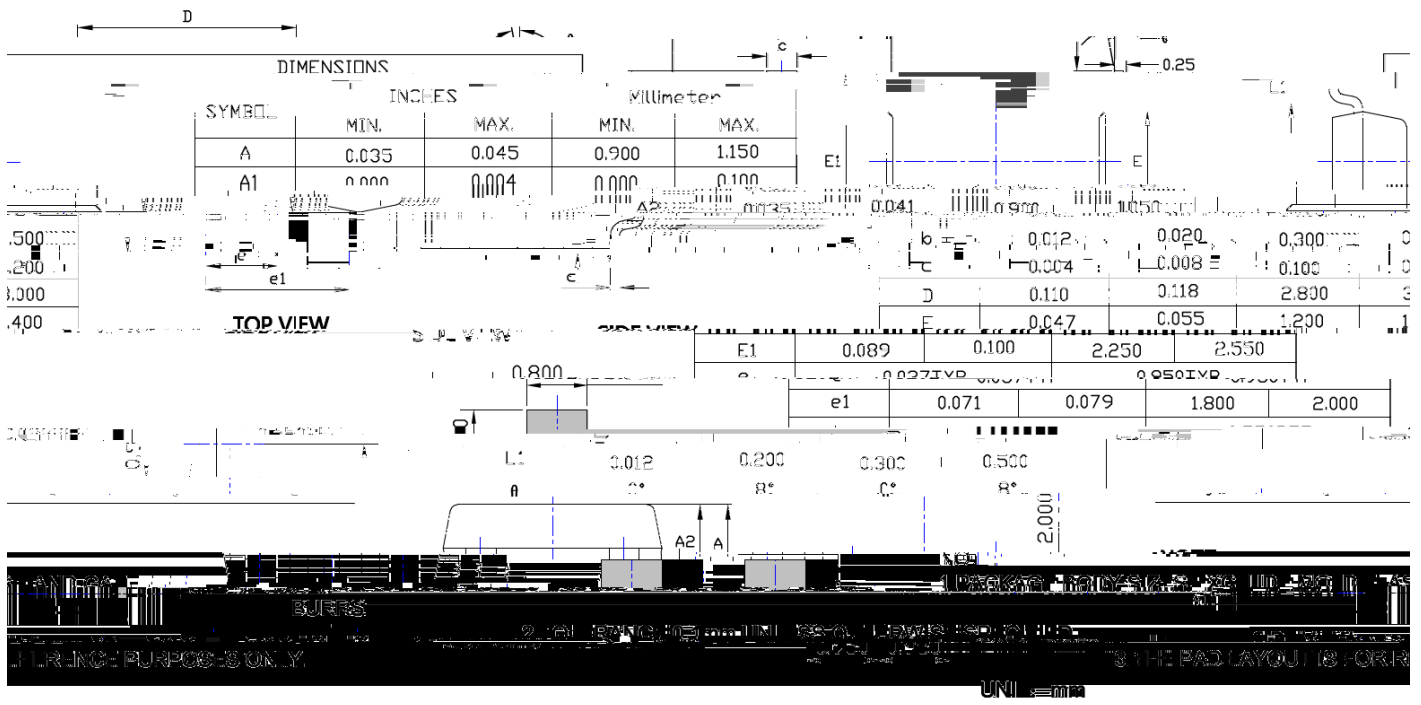


Figure8. Switching wave



# YJL3139KA

## SOT-23 Package information





## Disclaimer

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