



# 2SK536

## N-Channel MOSFET 50V, 100mA, Single CP

ON Semiconductor®

http://onsemi.com

### Features

- Large  $|y_{fs}|$
- Enhancement type
- Low ON-state resistance

### Specifications

#### Absolute Maximum Ratings at $T_a=25^\circ\text{C}$

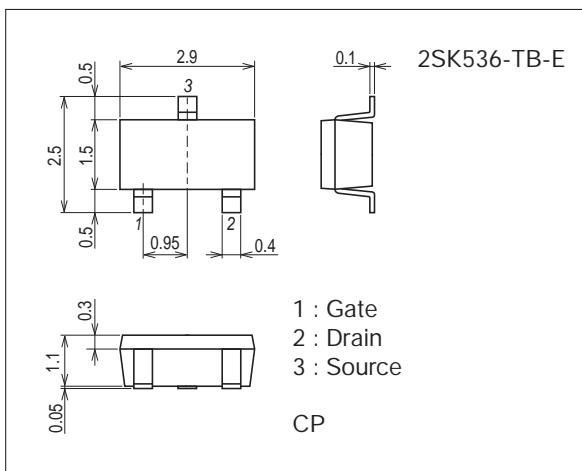
Parameter	Symbol	Conditions	Ratings	Unit
Drain to Source Voltage	$V_{DS}$		50	V
Gate to Source Voltage	$V_{GS}$		$\pm 12$	V
Drain Current	$I_D$		100	mA
Drain Current(Pulse)	$I_{DP}$		300	mA
Allowable Power Dissipation	$P_D$		200	mW
Channel Temperature	$T_{ch}$		125	$^\circ\text{C}$
Storage Temperature	$T_{stg}$		-55 to +125	$^\circ\text{C}$

Stresses exceeding Maximum Ratings may damage the device. Maximum Ratings are stress ratings only. Functional operation above the Recommended Operating Conditions is not implied. Extended exposure to stresses above the Recommended Operating Conditions may affect device reliability.

### Package Dimensions

unit : mm (typ)

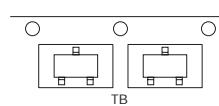
7013A-010



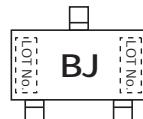
### Ordering & Package Information

Device	Package	Shipping	memo
2SK536-TB-E	CP SC-59, TO-236, SOT-23, TO-236AB	3,000pcs./reel	Pb-Free

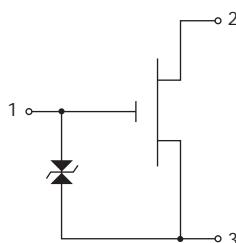
### Packing Type: TB



### Marking

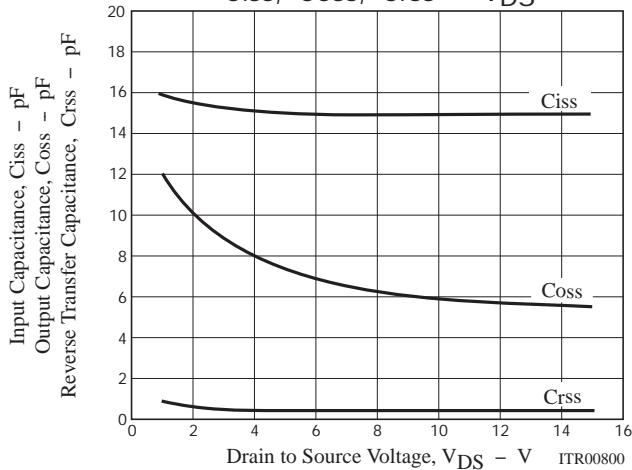
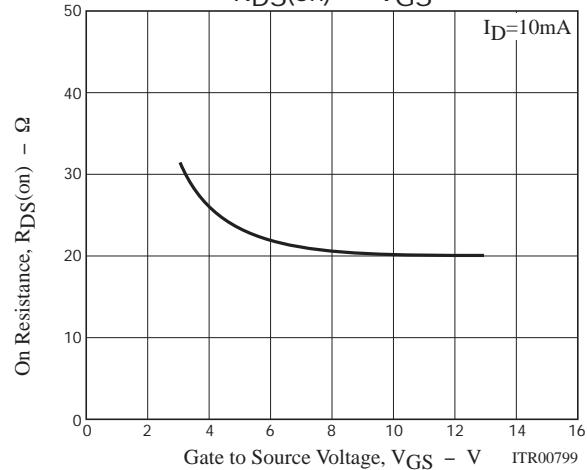
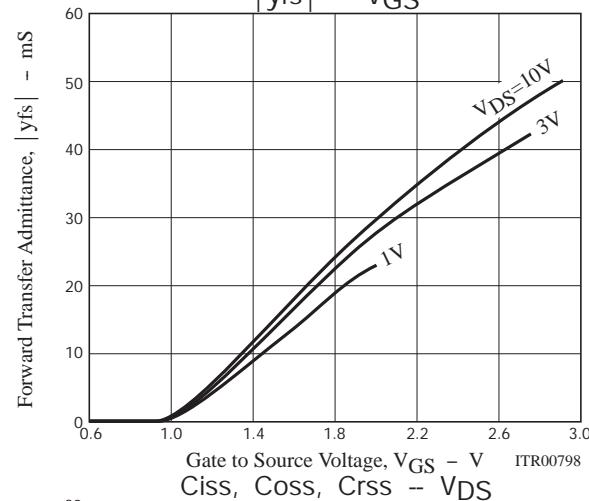
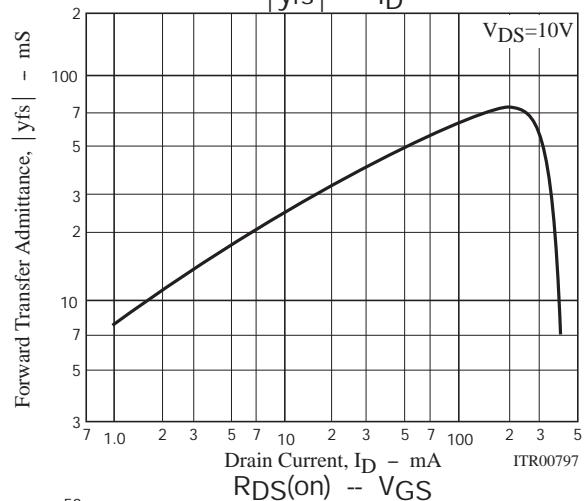
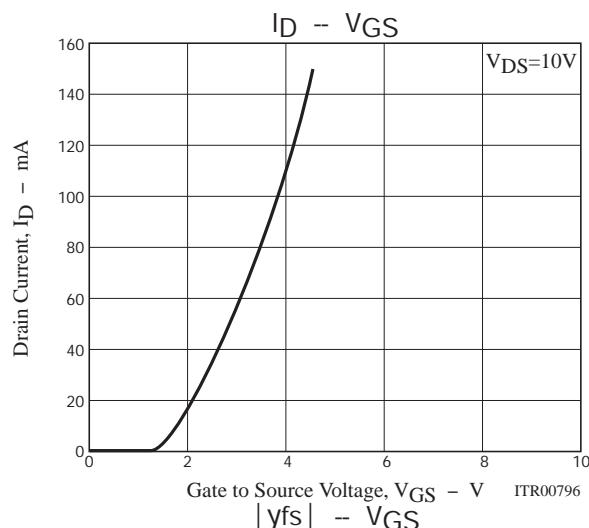
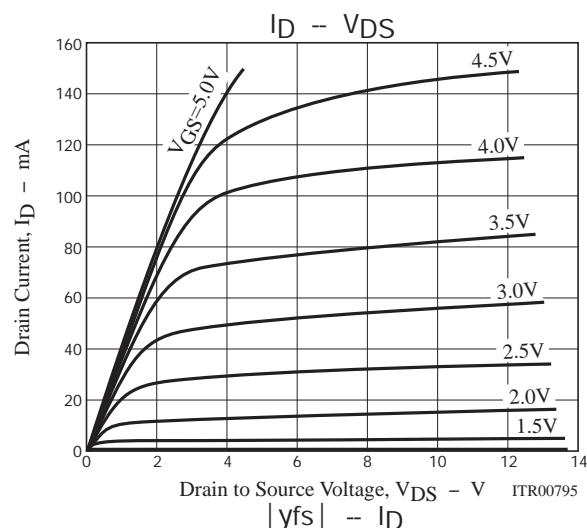


### Electrical Connection



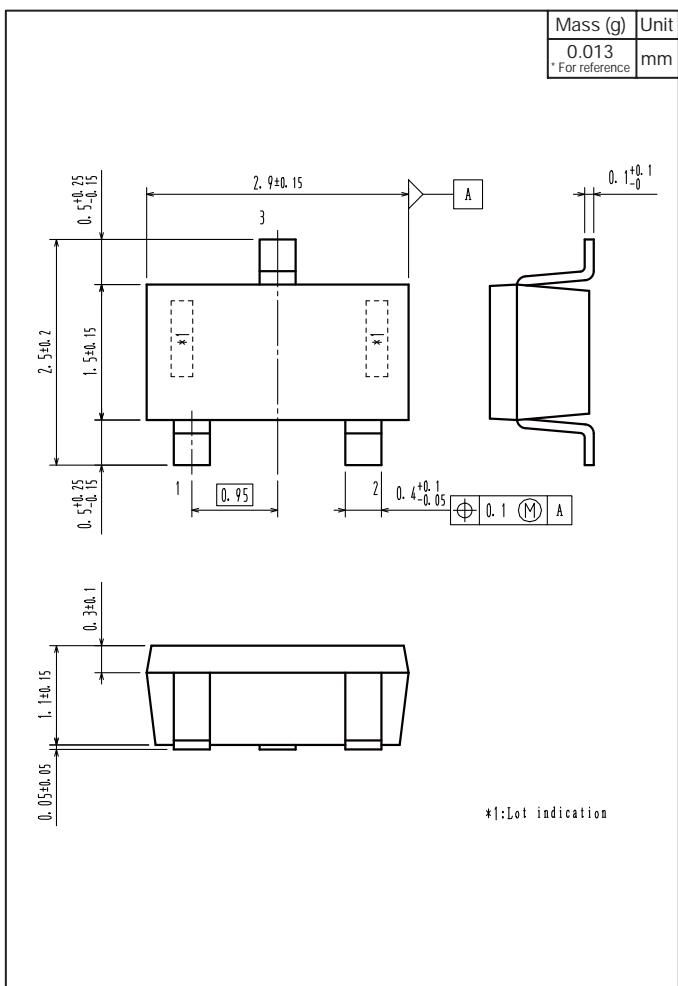
Electrical Characteristics at  $T_a=25^\circ C$ 

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Drain to Source Breakdown Voltage	$V_{(BR)DS}$	$I_D=10\mu A, V_{GS}=0V$	50			V
Gate to Source Leakage Current	$I_{GSS}$	$V_{GS}=10V, V_{DS}=0V$		0.01	10	nA
Zero-Gate Voltage Drain Current	$I_{DSS}$	$V_{DS}=20V, V_{GS}=0V$			1	$\mu A$
Cutoff Voltage	$I_{GS}(\text{off})$	$V_{DS}=10V, I_D=100\mu A$	0.3	0.9	1.5	V
Forward Transfer Admittance	$ y_{fs} $	$V_{DS}=10V, I_D=50mA, f=1kHz$	25	40		mS
Input Capacitance	$C_{iss}$	$V_{DS}=10V, V_{GS}=0V, f=1MHz$		15		pF
Output Capacitance	$C_{oss}$			6		pF
Reverse Transfer Capacitance	$C_{rss}$			0.5		pF
Drain to Source ON Resistance	$R_{DS(\text{on})}$	$V_{GS}=10V, I_D=10mA$		20		$\Omega$

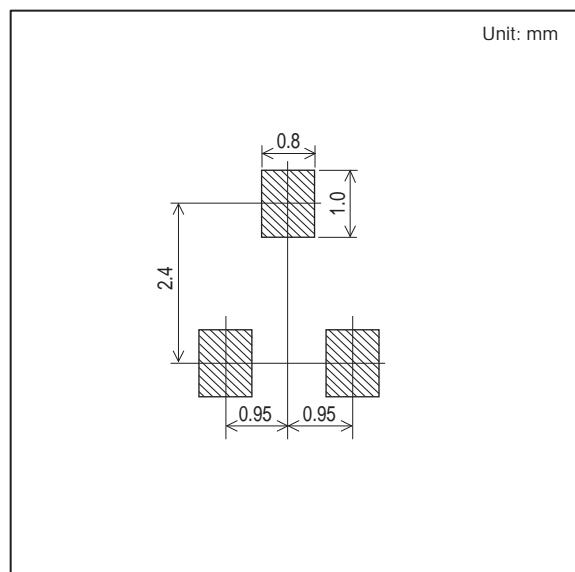


## Outline Drawing

2SK536-TB-E



## Land Pattern Example



**Note on usage :** Since the 2SK536 is a MOSFET product, please avoid using this device in the vicinity of highly charged objects.

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