## 2SK536

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



http://onsemi.com

#### **Features**

- · Large | yfs |
- · Enhancement type
- · Low ON-state resistance

#### **Specifications**

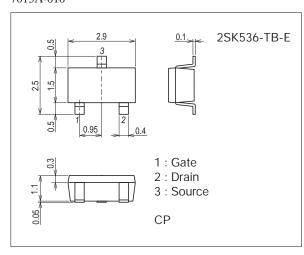
#### Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Drain to Source Voltage	V <sub>DS</sub>		50	V
Gate to Source Voltage	V <sub>G</sub> S		±12	V
Drain Current	ID		100	mA
Drain Current(Pulse)	IDP		300	mA
Allowable Power Dissipation	PD		200	mW
Channel Temperature	Tch		125	°C
Storage Temperature	Tstg		-55 to +125	°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

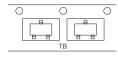


#### Ordering & Package Information

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

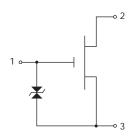
Marking

#### Packing Type: TB



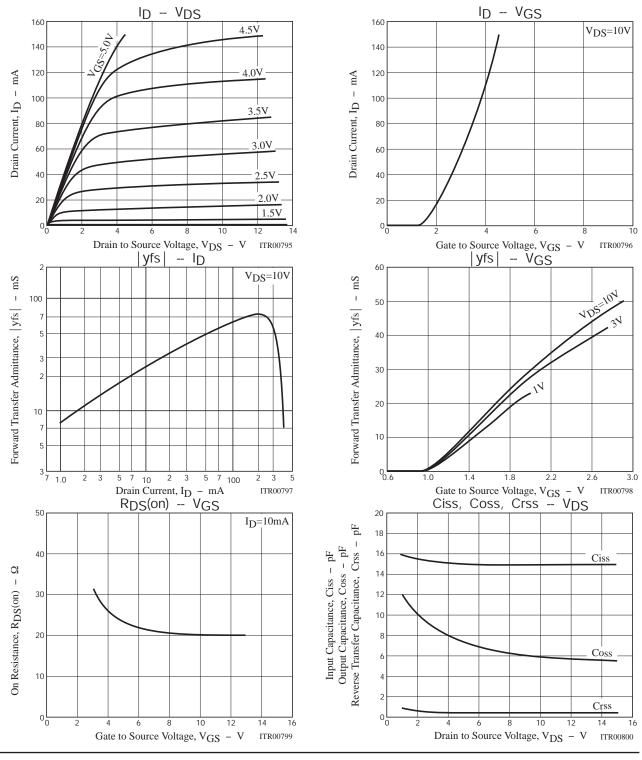


#### **Electrical Connection**



#### Electrical Characteristics at Ta=25°C

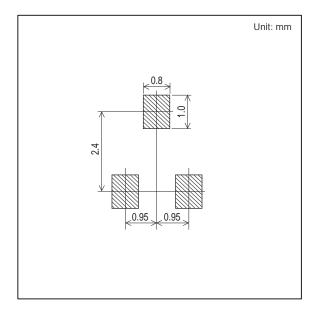
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	Unit
Drain to Source Breakdown Voltage	V(BR)DS	I <sub>D</sub> =10μA, V <sub>G</sub> S=0V	50			V
Gate to Source Leakage Current	IGSS	V <sub>GS</sub> =10V, V <sub>DS</sub> =0V		0.01	10	nA
Zero-Gate Voltage Drain Current	IDSS	V <sub>DS</sub> =20V, V <sub>GS</sub> =0V			1	μΑ
Cutoff Voltage	IGS(off)	V <sub>DS</sub> =10V, I <sub>D</sub> =100μA	0.3	0.9	1.5	V
Forward Transfer Admittance	yfs	V <sub>DS</sub> =10V, I <sub>D</sub> =50mA, f=1kHz	25	40		mS
Input Capacitance	Ciss	V <sub>DS</sub> =10V, V <sub>GS</sub> =0V, f=1MHz		15		pF
Output Capacitance	Coss			6		pF
Reverse Transfer Capacitance	Crss			0.5		pF
Drain to Source ON Resistance	RDS(on)	V <sub>G</sub> S=10V, I <sub>D</sub> =10mA		20		Ω



# Outline Drawing 2SK536-TB-E

## Mass (g) Unit 0.013 For reference mm 0. 1+0. 1 0. 5+0. 25 2. 9±0.15 A 3 1. 5±0. 15 2. 5±0. 2 $0.5^{+0.25}_{-0.15}$ 0. 95 0. 3±0.1 1, 1±0, 15 0. 05±0.05 \*1:Lot indication

#### 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.

ON Semiconductor and the ON logo are registered trademarks of Semiconductor Components Industries, LLC (SCILLC). SCILLC owns the rights to a number of patents, trademarks, copyrights, trade secrets, and other intellectual property. A listing of SCILLC's product/patent coverage may be accessed at www.onsemi.com/site/pdf/Patent-Marking.pdf. SCILLC reserves the right to make changes without further notice to any products herein. SCILLC makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does SCILLC assume any liability arising out of the application or use of any product or circuit, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages. "Typical" parameters which may be provided in SCILLC data sheets and/or specifications can and do vary in different applications and actual performance may vary over time. All operating parameters, including "Typicals" must be validated for each customer application by customer's technical experts. SCILLC does not convey any license under its patent rights nor the rights of others. SCILLC products are not designed, intended, or authorized for use as components in systems intended for surgical implant into the body, or other applications intended to support or sustain life, or for any other application in which the failure of the SCILLC product could create a situation where personal injury or death may occur. Should Buyer purchase or use SCILLC products for any such unintended or unauthorized application, Buyer shall indemnify and hold SCILLC and its officers, employees, subsidiaries, affiliates, and distributors harmless against all claims, costs, damages, and expenses, and reasonable attorney fees arising out of, directly or indirectly, any claim of personal injury or death associated with such unintended or unauthorized use, even if such claim alleges that SCILLC was negligent regarding the design or manufacture of the part. SCILLC is an Equa

### **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

Click to view similar products for JFET category:

Click to view products by ON Semiconductor manufacturer:

Other Similar products are found below:

MCH3914-8-TL-H F5606 2SK2394-6-TB-E CPH5901G-TL-E MCH3914-7-TL-H MCH5908H-TL-E CPH5902G-TL-E CPH5905G-TL-E CPH5905H-TL-E 2SK2394-7-TB-E NSVJ2394SA3T1G 2N3819 PN4393 MMBF5103 MMBFJ202 2N4393 U311 2N5397 2SK208-GR(TE85L,F) J176\_D74Z 2N2608 2N2609 2N3821 2N3823 2N3954 2N3970 2N3971 2N3972 2N4091 2N4092 2N4093 2N4118 2N4118A 2N4220 2N4221A 2N4338 2N4339 2N4341 2N4416 2N4416A 2N4856 2N4858 2N4861 2N4861A 2N5020 2N5115 2N6550 IF1331 IF140 IFN146