



# 2SK2394

## N-Channel JFET 15V, 6 to 32mA, 38mS, CP

ON Semiconductor®

<http://onsemi.com>

### Applications

- AM tuner RF amplifier
- Low-noise amplifier

### Features

- Large |yfs|
- Small Ciss
- Small-sized package permitting 2SK2394-applied sets to be made small slim
- Ultralow noise figure

### Specifications

Absolute Maximum Ratings at Ta=25°C

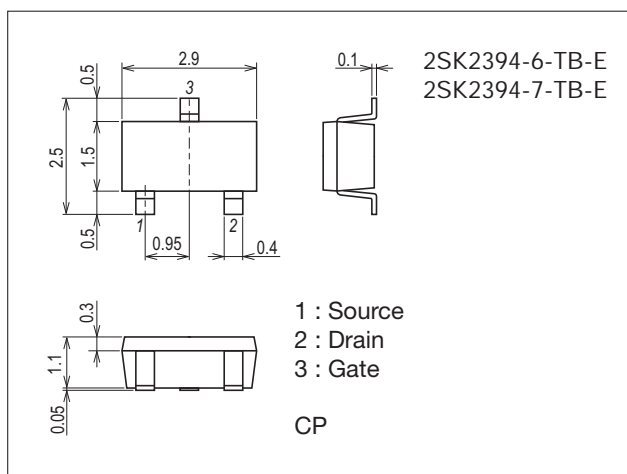
Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	V <sub>DSX</sub>		15	V
Gate-to-Drain Voltage	V <sub>GDS</sub>		-15	V
Gate Current	I <sub>G</sub>		10	mA
Drain Current	I <sub>D</sub>		50	mA
Allowable Power Dissipation	P <sub>D</sub>		200	mW
Junction Temperature	T <sub>j</sub>		150	°C
Storage Temperature	T <sub>stg</sub>		-55 to +150	°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)

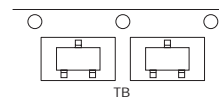
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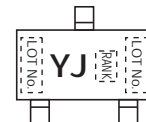
### Product & Package Information

- Package : CP
- JEITA, JEDEC : SC-59, TO-236, SOT-23, TO-236AB
- Minimum Packing Quantity : 3,000 pcs./reel

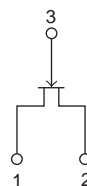
### Packing Type: TB



### Marking



### Electrical Connection



# 2SK2394

## Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Gate-to-Drain Breakdown Voltage	V(BR)GDS	IG=-10μA, VDS=0V	-15			V
Gate Cutoff Current	IGSS	VGS=-10V, VDS=0V			-1.0	nA
Cutoff Voltage	VGS(off)	VDS=5V, ID=100μA	-0.3	-0.7	-1.5	V
Drain Current	IDSS	VDS=5V, VGS=0V	6.0*		32.0*	mA
Forward Transfer Admittance	yfs	VDS=5V, VGS=0V, f=1kHz	20	38		mS
Input Capacitance	Ciss	VDS=5V, VGS=0V, f=1MHz		10.0		pF
Reverse Transfer Capacitance	Crss			2.9		pF
Noise Figure	NF	VDS=5V, RG=1kΩ, ID=1mA, f=1kHz		1.0		dB

\* : The 2SK2394 is classified by IDSS as follows : (unit : mA)

Rank	5	6	7
IDSS	6.0 to 12.0	10.0 to 20.0	16.0 to 32.0

## Ordering Information

Device	Package	Shipping	memo
2SK2394-6-TB-E	CP	3,000pcs./reel	Pb Free
2SK2394-7-TB-E	CP	3,000pcs./reel	

