# imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



# Contact us

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# 2SK2394

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



# **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**

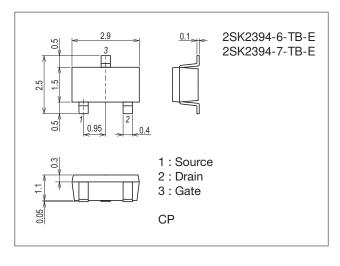
#### Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	V <sub>DSX</sub>		15	V
Gate-to-Drain Voltage	VGDS		-15	V
Gate Current	IG		10	mA
Drain Current	ID		50	mA
Allowable Power Dissipation	PD		200	mW
Junction Temperature	Tj		150	°C
Storage Temperature	Tstg		-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) 7013A-011

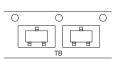


#### Product & Package Information • Package : CP

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

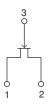
#### Packing Type: TB

## Marking





## **Electrical Connection**



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

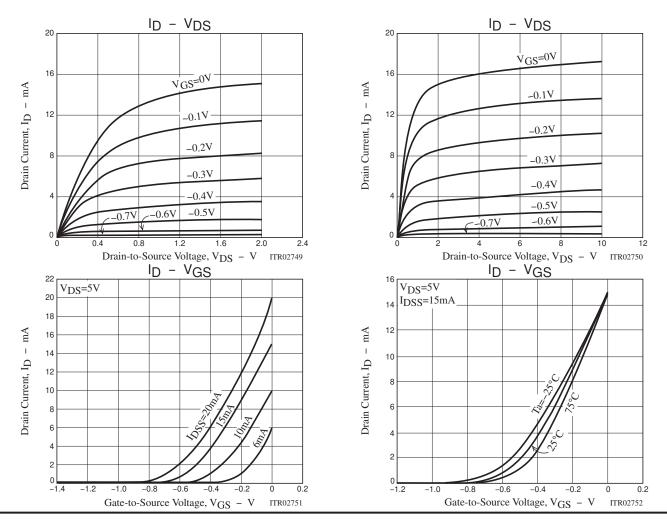
Parameter	Symbol	Conditions	Ratings			Unit
		Conditions	min	typ	max	Unit
Gate-to-Drain Breakdown Voltage	V(BR)GDS	IG=-10μA, VDS=0V	-15			V
Gate Cutoff Current	IGSS	V <sub>GS</sub> =-10V, V <sub>DS</sub> =0V			-1.0	nA
Cutoff Voltage	V <sub>GS</sub> (off)	V <sub>DS</sub> =5V, I <sub>D</sub> =100μA	-0.3	-0.7	-1.5	V
Drain Current	IDSS	V <sub>DS</sub> =5V, V <sub>GS</sub> =0V	6.0*		32.0*	mA
Forward Transfer Admittance	yfs	VDS=5V, VGS=0V, f=1kHz	20	38		mS
Input Capacitance	Ciss			10.0		pF
Reverse Transfer Capacitance	Crss	V <sub>DS</sub> =5V, V <sub>GS</sub> =0V, f=1MHz		2.9		pF
Noise Figure	NF	$V_{DS}$ =5V, $R_g$ =1k $\Omega$ , ID=1mA, f=1kHz		1.0		dB

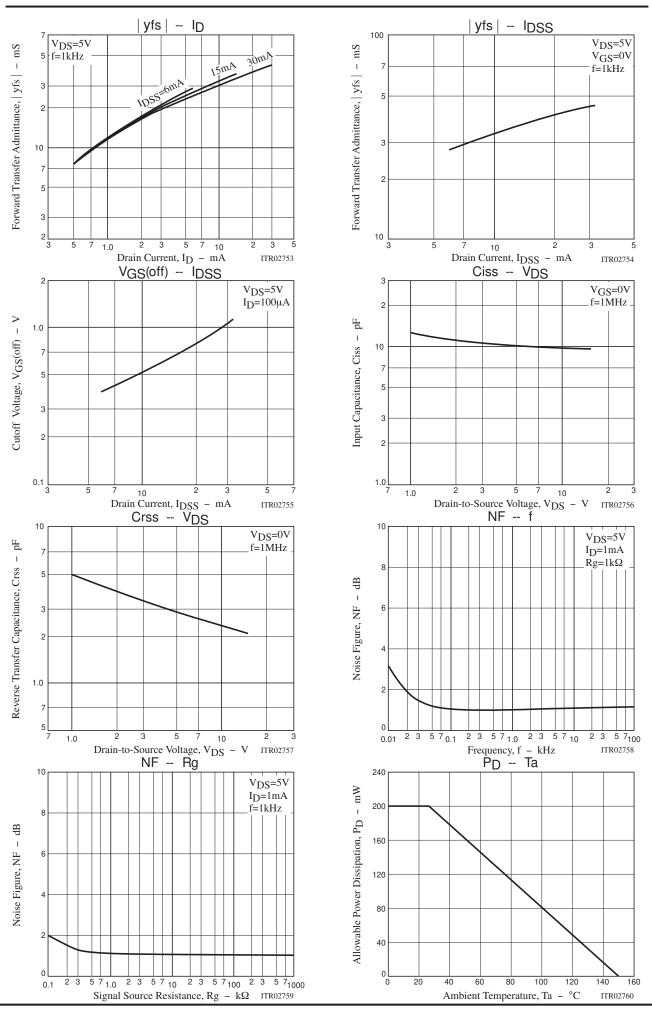
\* : The 2SK2394 is classified by IDSS as follows : (unit : mA)

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	CP 3,000pcs./reel		
2SK2394-7-TB-E	CP	3,000pcs./reel	Pb Free	

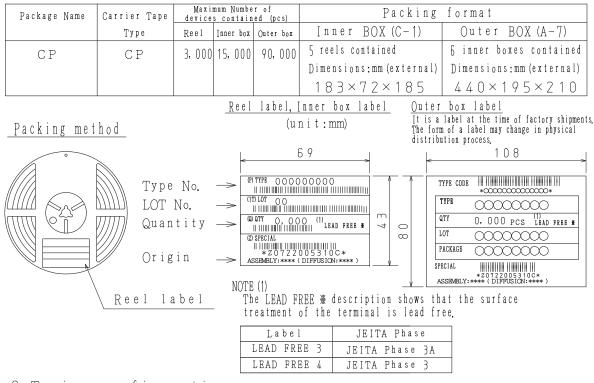




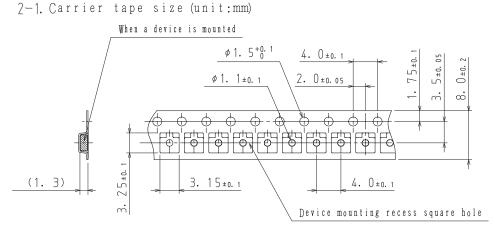
#### Embossed Taping Specification

2SK2394-6-TB-E, 2SK2394-7-TB-E

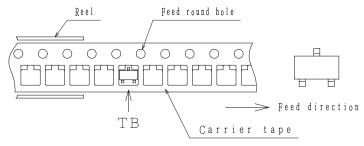
1. Packing Format



### 2. Taping configuration



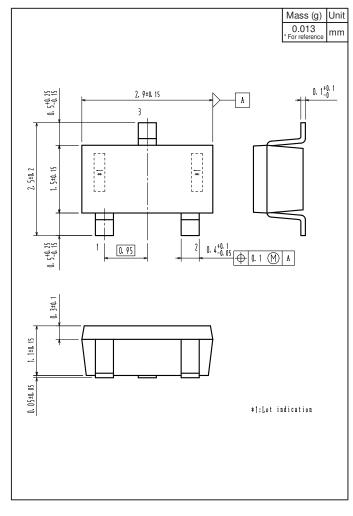
2-2. Device placement direction



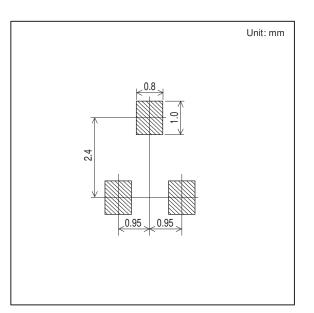
Those with one electrode terminal on the feed hole side ..... TB

#### **Outline Drawing**

2SK2394-6-TB-E, 2SK2394-7-TB-E



#### Land Pattern Example



2SK2394

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