



2SK3557

N-Channel JFET 15V, 10 to 32mA, 35mS, CP

ON Semiconductor®

<http://onsemi.com>

Applications

- AM tuner RF amplification
- Low noise amplifier

Features

- Large |yfs|
- Small Ciss
- Ultrasmall-sized package permitting 2SK3557-applied sets to be made smaller and slimer
- Ultralow noise figure

Specifications

Absolute Maximum Ratings at Ta=25°C

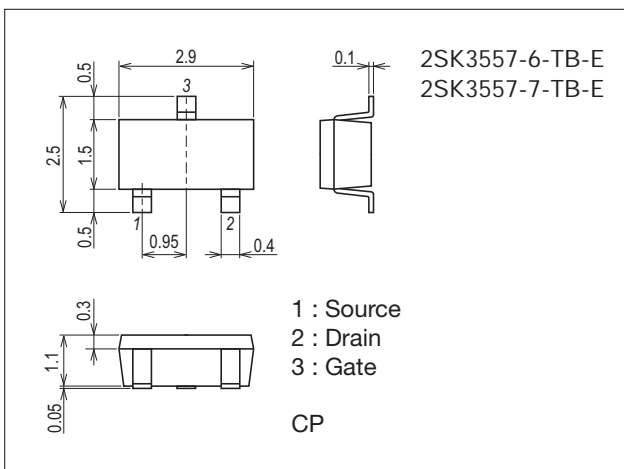
Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	V _{DSX}		15	V
Gate-to-Drain Voltage	V _{GDS}		-15	V
Gate Current	I _G		10	mA
Drain Current	I _D		50	mA
Allowable Power Dissipation	P _D		200	mW
Junction Temperature	T _j		150	°C
Storage Temperature	T _{stg}		-55 to +150	°C

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)

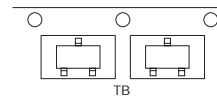
7013A-011



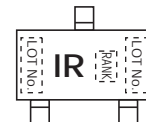
Product & Package Information

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

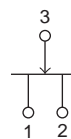
Packing Type: TL



Marking



Electrical Connection



Electrical Characteristics at Ta=25°C

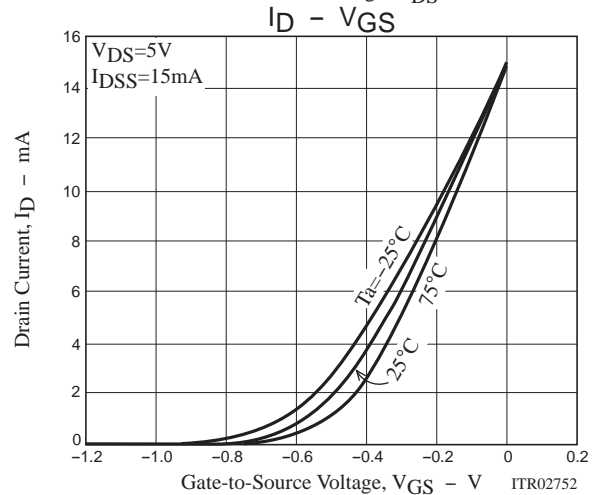
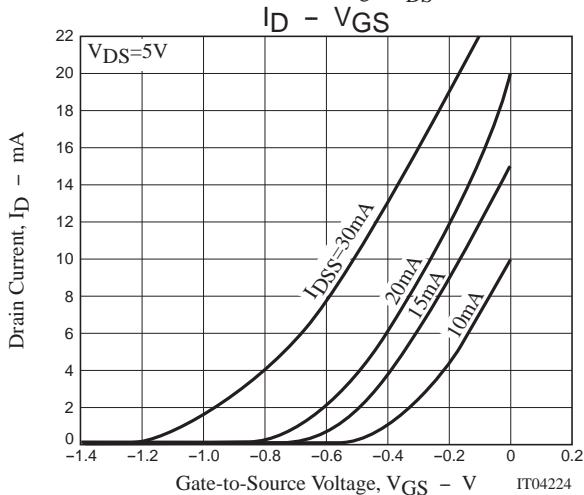
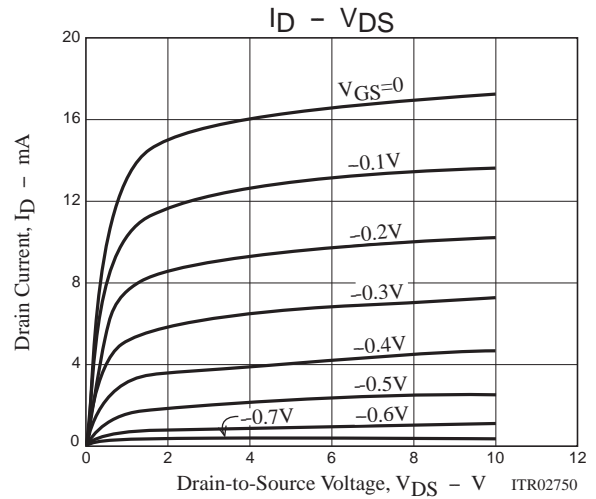
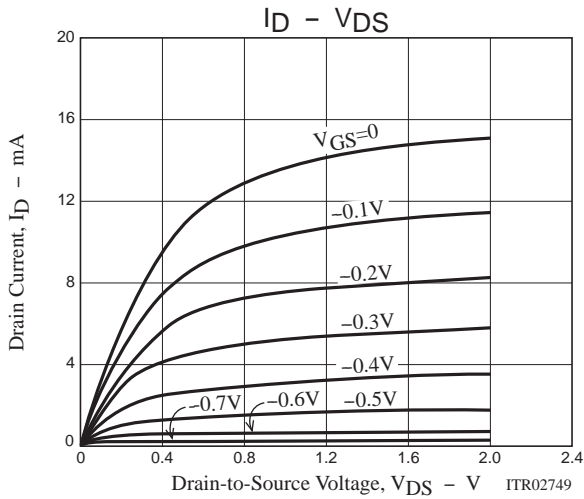
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Gate-to-Drain Breakdown Voltage	V(BR)GDS	IG=-10μA, VDS=0V	-15			V
Gate Cutoff Current	IGSS	VGS=-10V, VDS=0V			-1.0	nA
Cutoff Voltage	VGS(off)	VDS=5V, ID=100μA	-0.3	-0.7	-1.5	V
Drain Current	IDSS	VDS=5V, VGS=0V	10*		32*	mA
Forward Transfer Admittance	yfs	VDS=5V, VGS=0V, f=1kHz	24	35		mS
Input Capacitance	Ciss	VDS=5V, VGS=0V, f=1MHz		10.0		pF
Reverse Transfer Capacitance	Crss	VDS=5V, VGS=0V, f=1MHz		2.9		pF
Noise Figure	NF	VDS=5V, Rg=1kΩ, ID=1mA, f=1kHz		1.0		dB

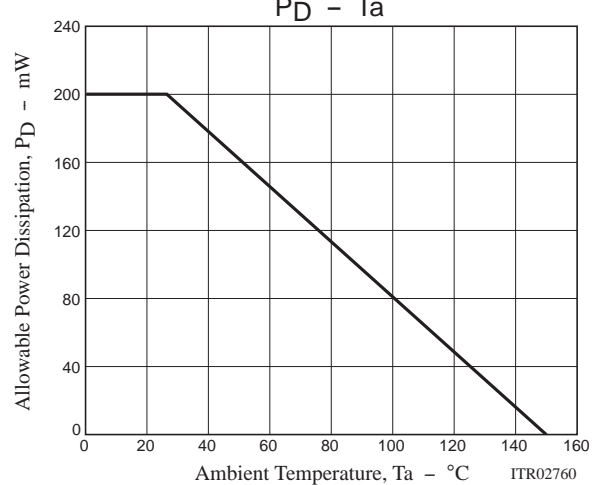
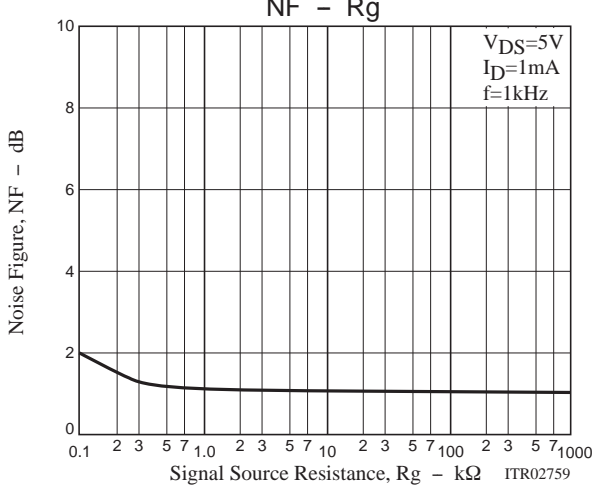
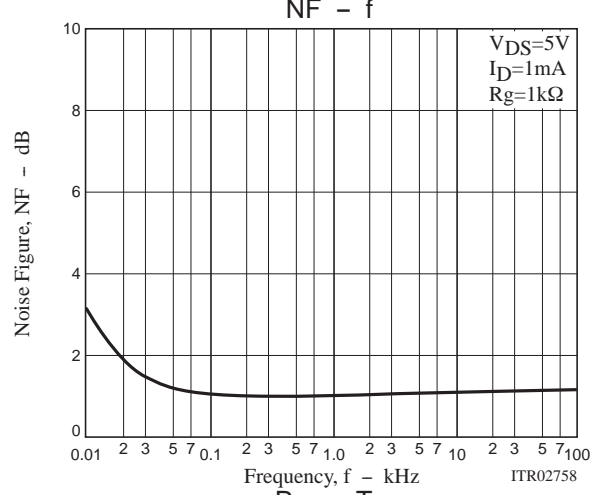
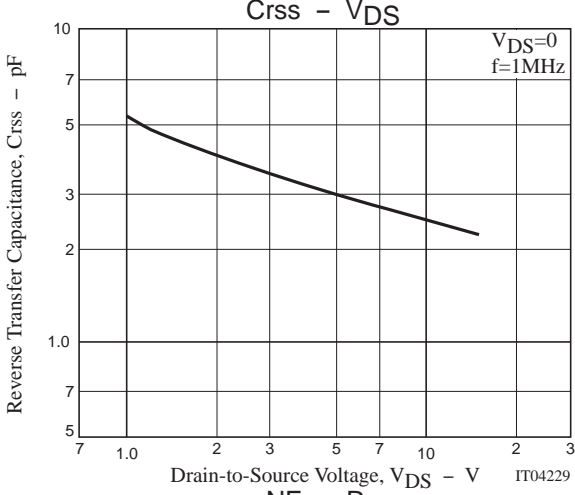
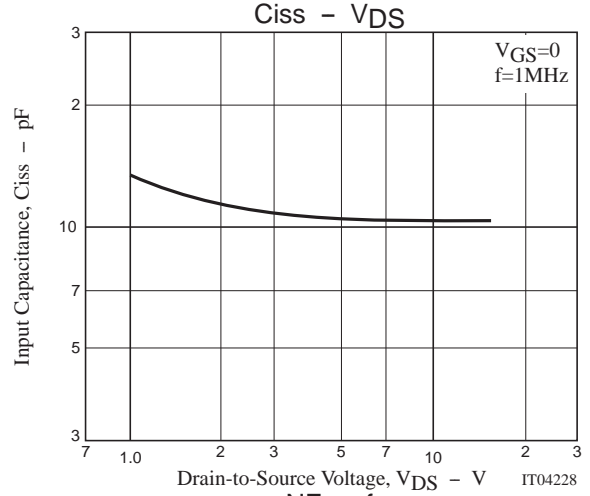
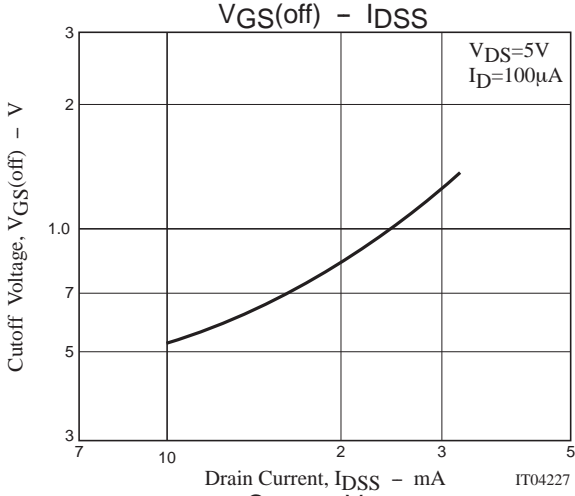
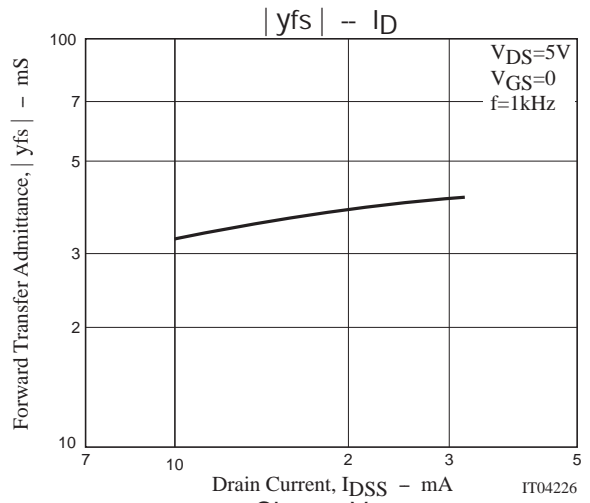
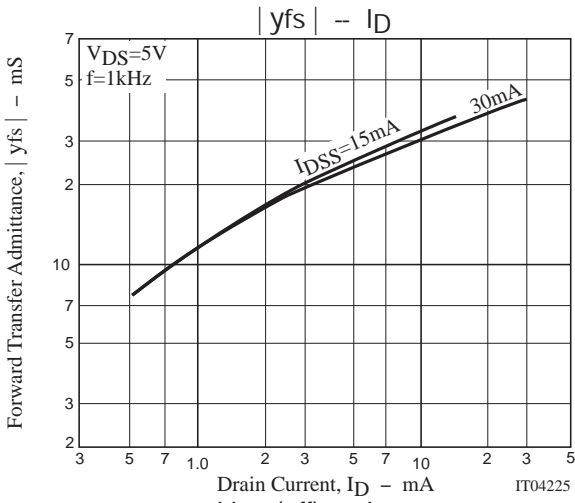
* : The 2SK3557 is classified by IDSS as follows : (unit : mA)

Rank	6	7
IDSS	10.0 to 20.0	16.0 to 32.0

Ordering Information

Device	Package	Shipping	memo
2SK3557-6-TB-E	CP	3,000pcs./reel	Pb Free
2SK3557-7-TB-E	CP	3,000pcs./reel	





Embossed Taping Specification

2SK3557-6-TB-E, 2SK3557-7-TB-E

1. Packing Format

Package Name	Carrier Tape Type	Maximum Number of devices contained (pcs)			Packing format	
		Reel	Inner box	Outer box	Inner BOX (C-1)	Outer BOX (A-7)
CP	CP	3,000	15,000	90,000	5 reels contained Dimensions:mm (external) 183×72×185	6 inner boxes contained Dimensions:mm (external) 440×195×210

Packing method



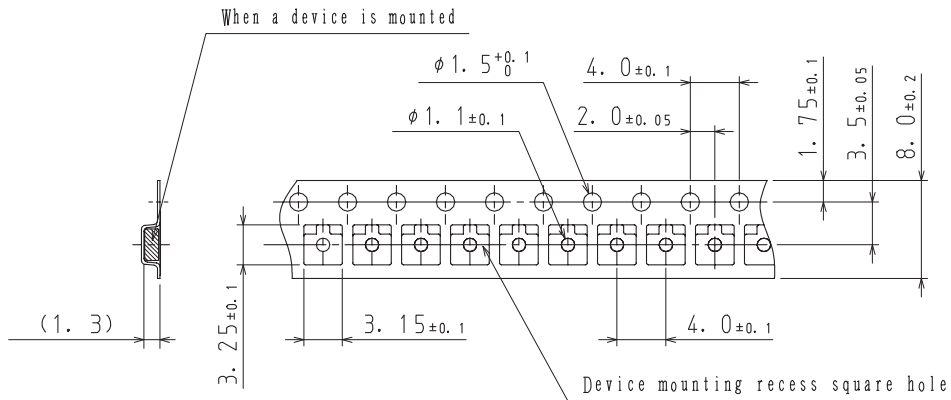
Reel label



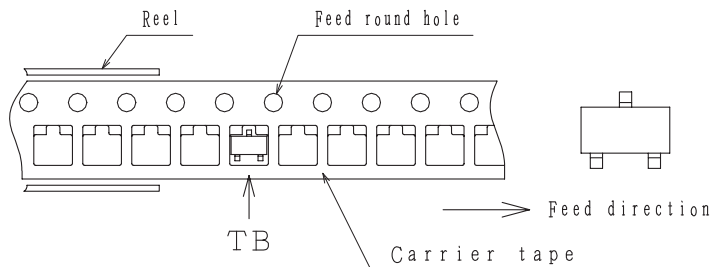
Label	JEITA Phase
LEAD FREE 3	JEITA Phase 3A
LEAD FREE 4	JEITA Phase 3

2. Taping configuration

2-1. Carrier tape size (unit:mm)



2-2. Device placement direction



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

Outline Drawing

2SK3557-6-TB-E, 2SK3557-7-TB-E



Land Pattern Example



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