

# 2SK492-T150

FOR LOW FREQUENCY AMPLIFY APPLICATION  
N CHANNEL JUNCTION TYPE FET

AEC-Q101 Compliance

## DESCRIPTION

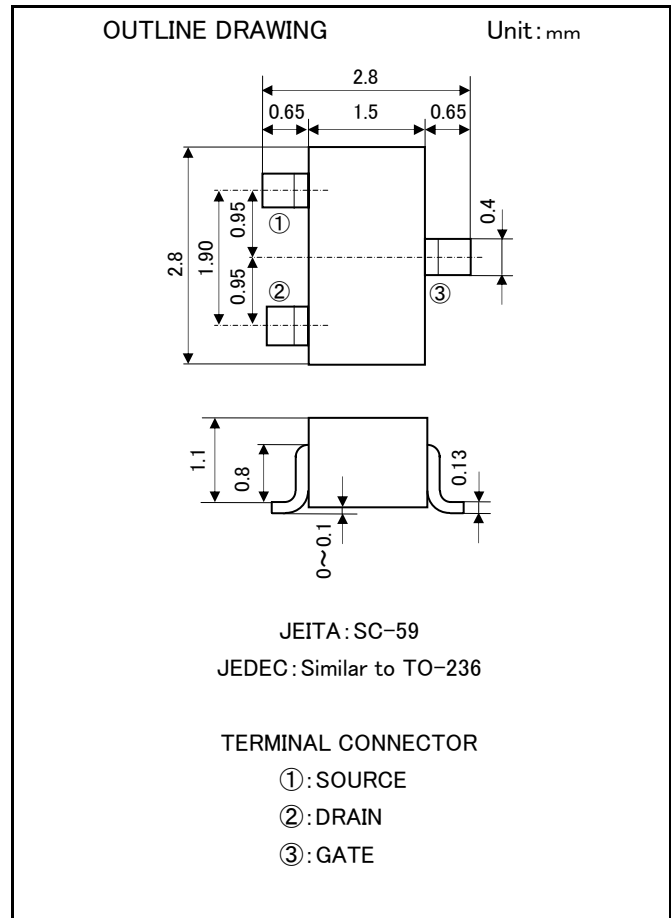
2SK492 is a super mini outline resin sealed N channel junction type FET. It is designed for low frequency voltage amplify, application and analog switch application.

## FEATURE

- Small type for mounting.
- High  $|y_{fs}|$   $|y_{fs}| = 8\text{mS (typ)}$
- Low  $R_{DS(ON)}$   $R_{DS(ON)} = 70\ \Omega$  (typ)

## APPLYCATION

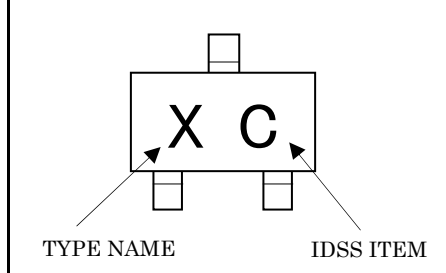
General purpose voltage amplify, analog switch circuit for stereo, cassette deck, VTR.



## MAXIMUN RATINGS (Ta=25°C)

Symbol	Parameter	Ratings	Unit
$V_{GD0}$	Gate to Drain voltage	-50	V
$I_G$	Gate current	10	mA
$P_T$	Total allowable dissipation	150	mW
$T_{ch}$	Channel temperature	+150	°C
$T_{stg}$	Storage temperature	-55~+150	°C

## MARKING



## ELECTRICAL CHARACTERISTICS (Ta=25°C)

Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
$I_{GSS}$	Gate leakage current	$V_{GS} = -30V, V_{DS} = 0V$	-	-	-1	nA
$I_{DSS} *$	Drain current	$V_{DS} = 10V, V_{GS} = 0V$	1	4	12	mA
$V_{GS(OFF)}$	Cut off voltage	$V_{DS} = 10V, I_D = 10\ \mu A$	-0.1	-	-2.0	V
$ y_{fs} $	Forward transfer admittance	$V_{DS} = 10V, V_{GS} = 0V, f = 1\text{kHz}$	6	15	-	mS
$ y_{fs} $	Forward transfer admittance	$V_{DS} = 10V, I_D = 1\text{mA}, f = 1\text{kHz}$	-	8	-	mS
$ y_{os} $	Output admittance	$V_{DS} = 10V, I_D = 1\text{mA}, f = 1\text{kHz}$	-	10	-	$\mu S$
$C_{iss}$	Input capacitance	$V_{DS} = 10V, V_{GS} = 0V, f = 1\text{MHz}$	-	20	-	pF
NF	Noise figure	$V_{DS} = 10V, I_D = 1\text{mA}, f = 100\text{MHz}, R_G = 1\text{k}\Omega$	-	1.0	-	dB
$R_{DS(ON)}$	Drain to Source resistor	$V_{DS} = 10\text{mVrms (1kHz)}, V_{GS} = 0V, I_{DSS} = 5\text{mA}$	-	70	-	$\Omega$

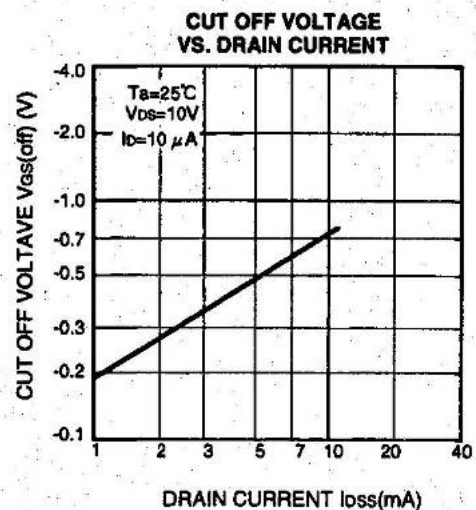
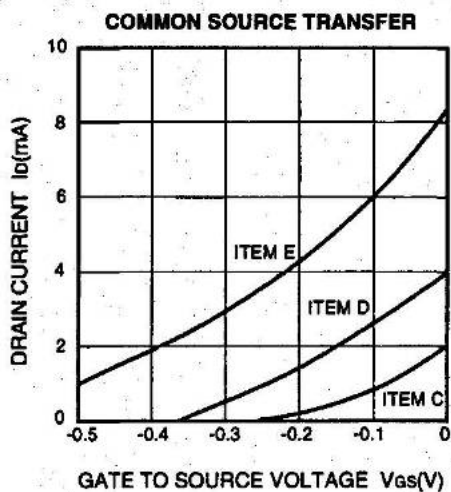
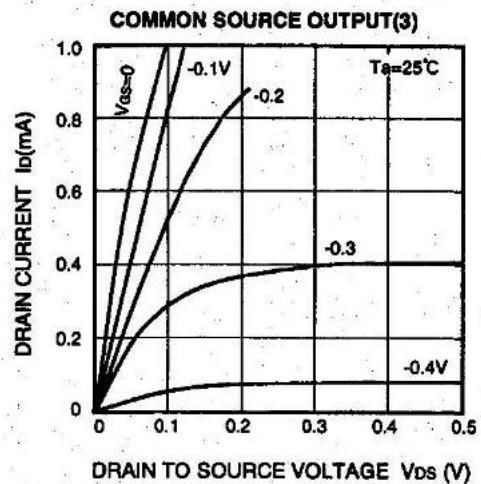
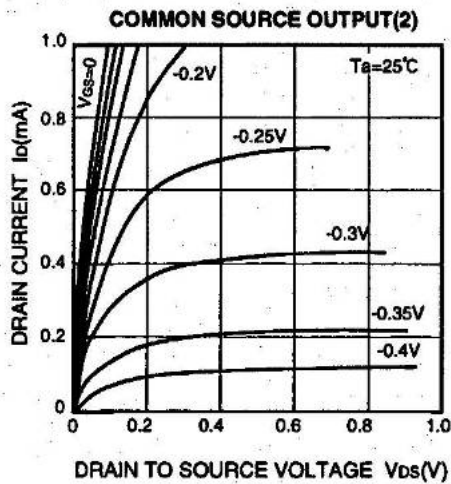
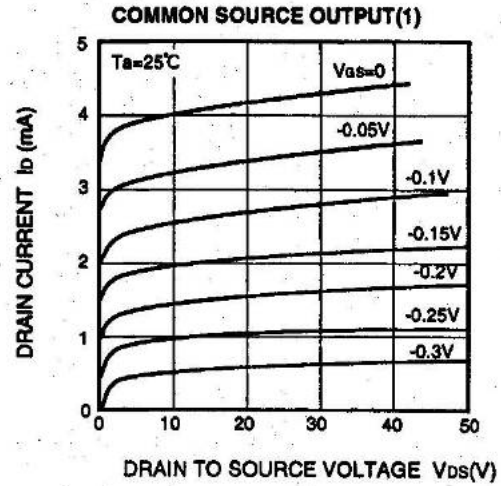
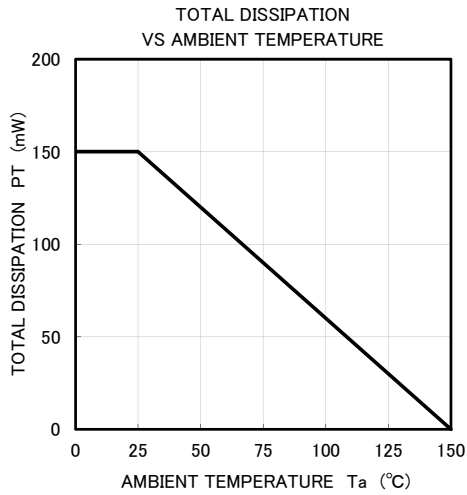
\* : It shows IDSS classification in right table.

ITEM	C	D	E
IDSS(mA)	1.0~3.0	2.5~6.0	5.0~12

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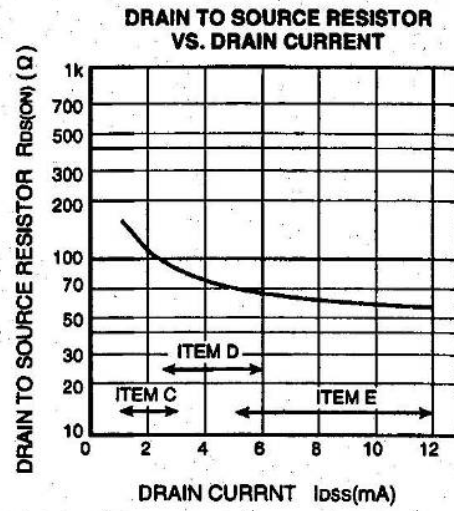
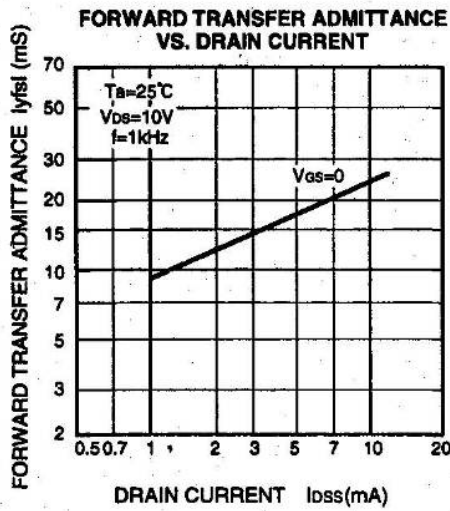
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## TYPICAL CHARACTERISTICS

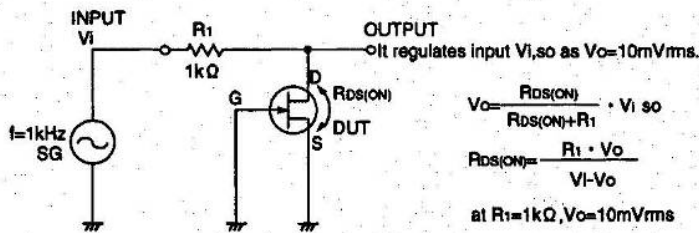


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## DRAIN TO SOURCE RESISTOR $R_{ds(ON)}$ TEST CIRCUIT





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