

# DESCRIPTION

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

# FEATURE

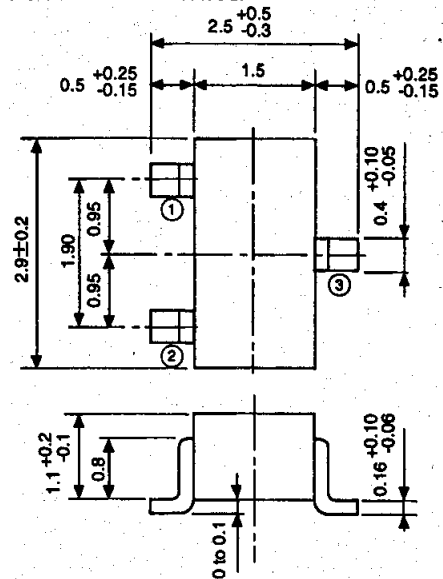
- Small type for mounting
- High  $|y_{fs}|$   $|y_{fs}|=8\text{mS}(\text{typ})$
- Low  $R_{DS(ON)}$   $R_{DS(ON)}=70\Omega$  typ

# APPLICATION

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

# OUTLINE DRAWING

Unit:mm



## TERMINAL CONNECTOR

- ① : SOURCE
- ② : DRAIN
- ③ : GATE

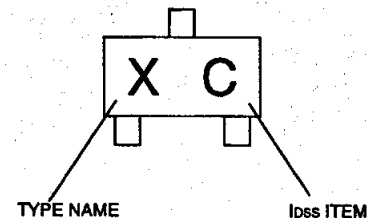
EIAJ : SC-59

JEDEC : TO-236 resemblance

Note)

The dimension without tolerance represent central value.

# MARKING



# MAXIMUM RATINGS (Ta=25°C)

Symbol	Parameter	Ratings	Unit
$V_{GD}$	Gate to Drain voltage	-50	V
$I_G$	Gate current	10	mA
$P_T$	Total allowable dissipation(Ta=25°C)	150	mW
$T_{ch}$	Channel temperature	+125	°C
$T_{stg}$	Storage temperature	-55 to +125	°C

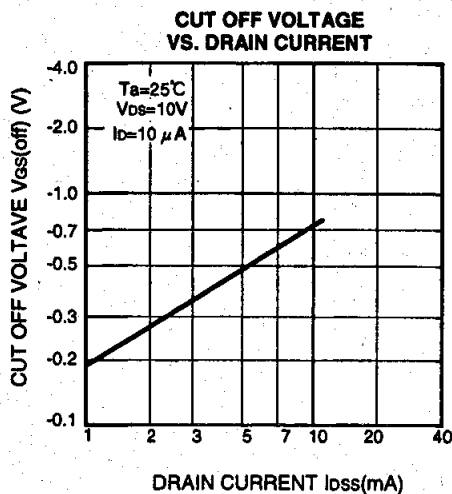
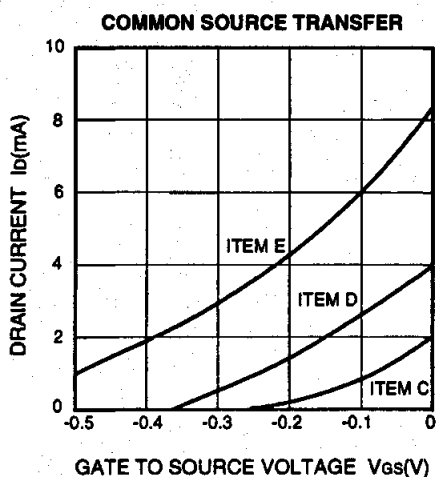
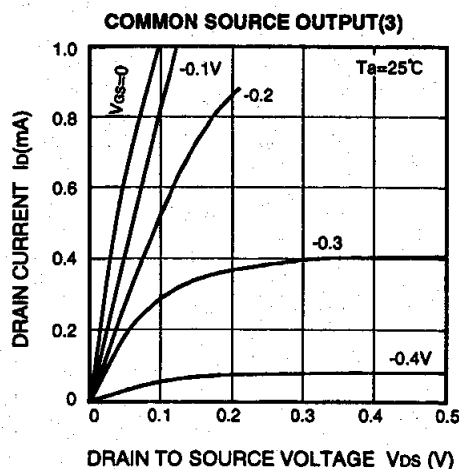
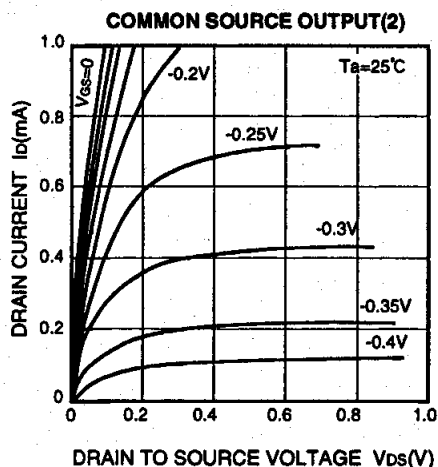
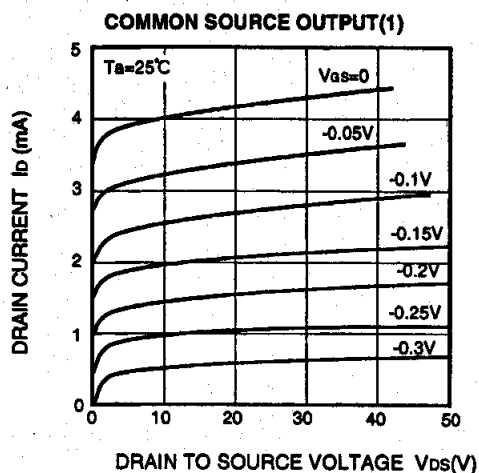
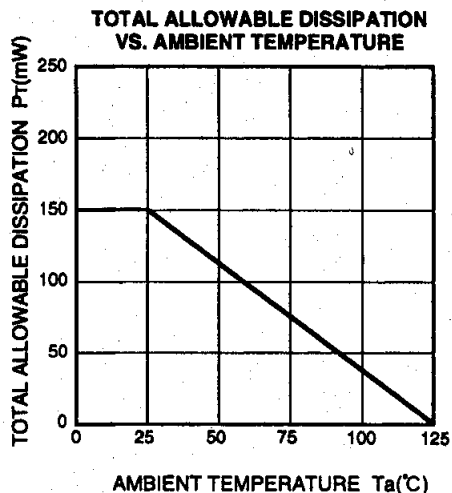
# ELECTRICAL CHARACTERISTICS (Ta=25°C)

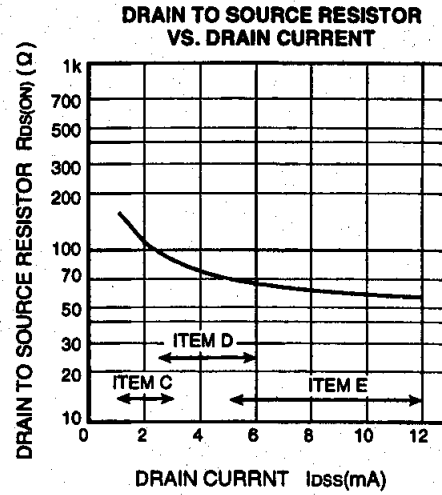
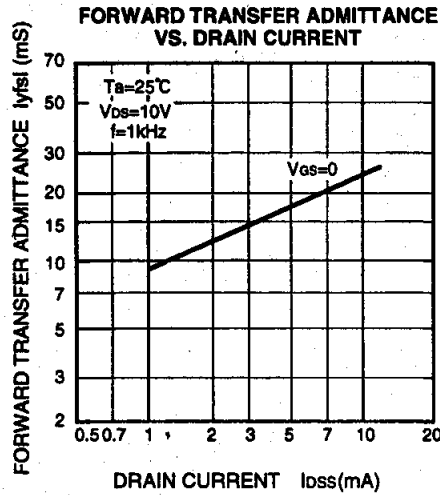
Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
$I_{SS}$	Gate leakage current	$V_{GS}=-30V, V_{DS}=0$			-1	nA
$I_{DSS}^*$	Drain current	$V_{DS}=10V, V_{GS}=0$	1	4	12	mA
$V_{GS(off)}$	Cut off voltage	$V_{DS}=10V, I_D=10\mu A$	-0.1		-2.0	V
$ y_{fs} $	Forward transfer admittance	$V_{DS}=10V, V_{GS}=0, f=1\text{kHz}$	6.0	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	$V_{DS}=10V, V_{GS}=0, f=1\text{MHz}$		20		pF
NF	Noise figure	$V_{DS}=10V, I_D=1\text{mA}, f=100\text{Hz}, R_G=1\text{k}\Omega$		1.0		dB
$R_{DS(ON)}$	Drain to source resistor	$V_{DS}=10\text{mVrms}(1\text{kHz}), V_{GS}=0, I_{DSS}=5\text{mA}$		70		$\Omega$

\* : It shows  $I_{SS}$  classification in right table.

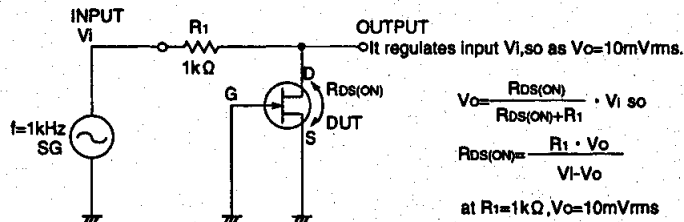
Item	C	D	E
$I_{DSS}$	1.0 to 3.0	2.5 to 6.0	5.0 to 12

TYPICAL CHARACTERISTICS





**DRAIN TO SOURCE RESISTOR  $R_{DS(ON)}$  TEST CIRCUIT**





<http://www.idc-com.co.jp>  
6-41, TSUKUBA, ISAHAYA, NAGASAKI, 854-0065, JAPAN

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