2SK606

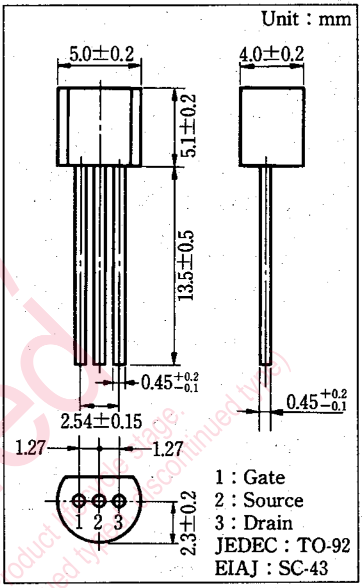
Silicon N Channel Junction Type

For high-frequency amplification

■ Features

- Large power gain PG
- Low noise figure NF
- Low small-signal short-circuit input capacitance C_{iss}
- Ideal for front ends of FN tuners

■ Package Dimensions



■ Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	Value	Unit
Gate-Drain Voltage	V_{GDO}	30	V
Drain Current	I_D	20	mA
Gate Current	I_G	10	mA
Power Dissipation	P_D	400	mW
Channel Temperature	T_{ch}	150	°C
Storage Temperature	T_{stg}	−55～+150	°C

■ Electrical Characteristics (Ta=25°C)

Item	Symbol	Condition	min.	typ.	max.	Unit
Gate-Drain Voltage	V_{GDO}	$I_G=10\ \mu A$, $V_{GS}=0$	30			V
Gate-Source Cutoff Voltage	V_{GSO}	$V_{DS}=5$ V, $I_D=10\ \mu A$			−3	V
Gate Cutoff Current	I_{GSS}	$V_{GS}=-0.5$ V, $V_{DS}=0$			10	nA
Drain Current	I_{DSS}*	$V_{DS}=5$ V, $V_{GS}=0$	0.5		20	mA
Mutual Conductance	g_m	$V_{DS}=5$ V, $V_{GS}=0$, f=1 kHz	5			mS
Input Capacitance	C_{iss}	$V_{DS}=5$ V, $V_{GS}=0$, f=1 MHz		5	8	pF
Small-Signal Reverse Transfer Capacitance	C_{rss}	$V_{DS}=5$ V, $I_D=1$ mA, f=1 MHz			0.3	pF
Power Gain	PG	$V_{DS}=5$ V, $V_{GS}=0$, f=100 MHz	15	25		dB
Noise Figure	NF	$V_{DS}=5$ V, $V_{GS}=0$, f=100 MHz		1.7	4.0	dB

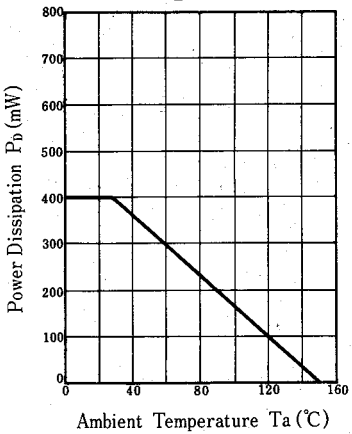
* I_{DSS} Ranking

Rank	P	Q	R	S
I_{DSS}(mA)	0.5～3	2～7	5～12	10～20

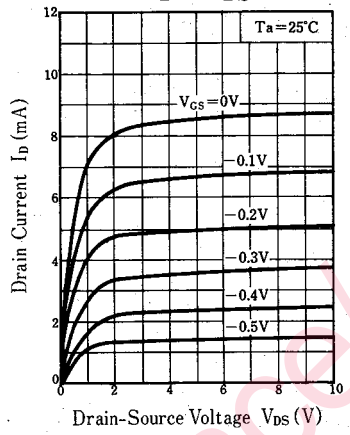
Maintenance/Discontinued
Maintenance/Discontinued includes following four Product lifecycle stage.
(planed maintenance type, maintenance type, planed discontinued typed, discontinued type)

Panasonic

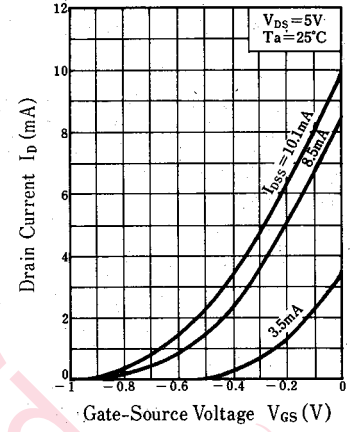
$P_D - Ta$



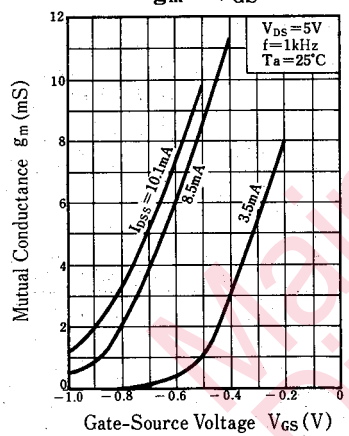
$I_D - V_{DS}$



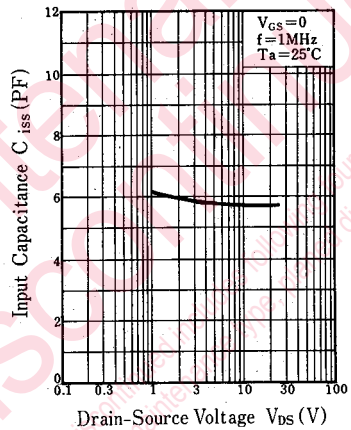
$I_D - V_{GS}$



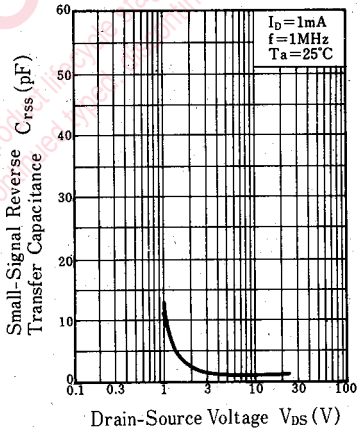
$g_m - V_{GS}$



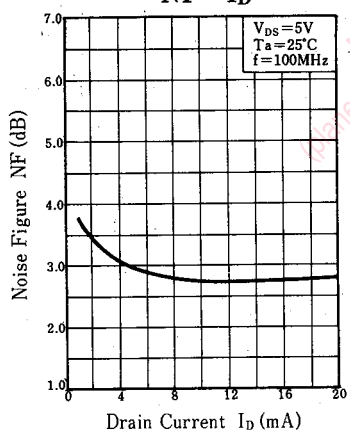
$C_{iss} - V_{DS}$



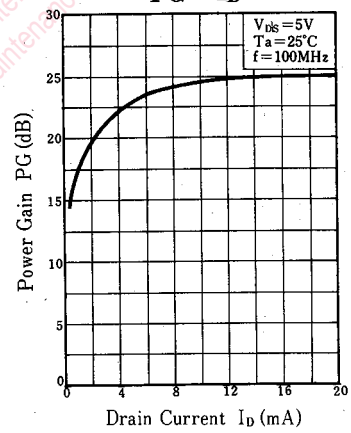
$C_{rss} - V_{DS}$



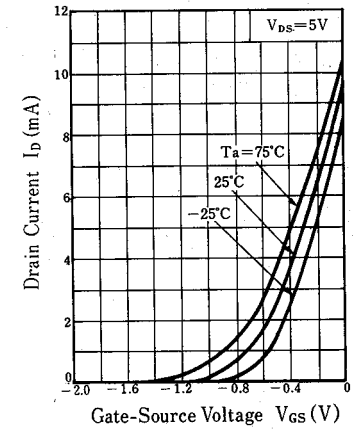
$NF - I_D$



$PG - I_D$



$I_D - V_{GS}$



Maintenance/Discontinued
(Rated maintenance type, maintenance/discontinued type)

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