

2SJ148

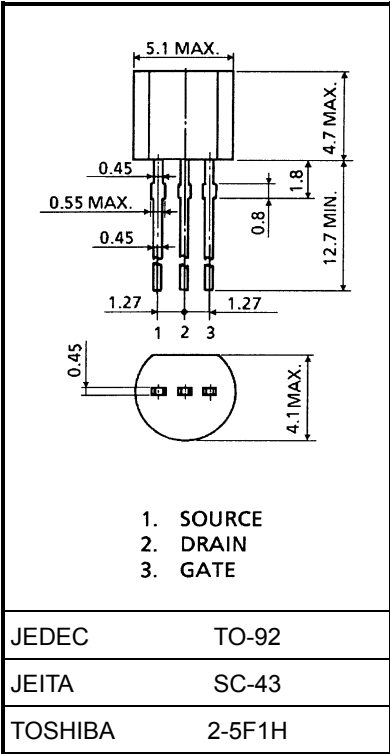
High Speed Switching Applications  
Analog Switch Applications  
Interface Applications

- Excellent switching time:  $t_{on} = 14\text{ ns}$  (typ.)
- High forward transfer admittance:  $|Y_{fs}| = 100\text{ mS}$  (min)
- Low on resistance:  $R_{DS(ON)} = 1.3\text{ }\Omega$  (typ.)
- Enhancement-mode
- Complementary to 2SK982

Maximum Ratings (Ta = 25°C)

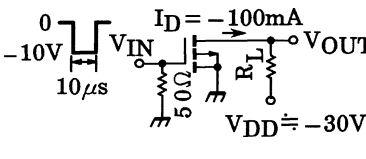
Characteristics		Symbol	Rating	Unit
Drain-source voltage		$V_{DSS}$	-60	V
Gate-source voltage		$V_{GSS}$	$\pm 20$	V
Drain current	DC	$I_D$	-200	mA
	Pulse	$I_{DP}$	-800	
Drain power dissipation (Ta = 25°C)		$P_D$	400	mW
Channel temperature		$T_{ch}$	150	°C
Storage temperature range		$T_{stg}$	-55~150	°C

Unit: mm

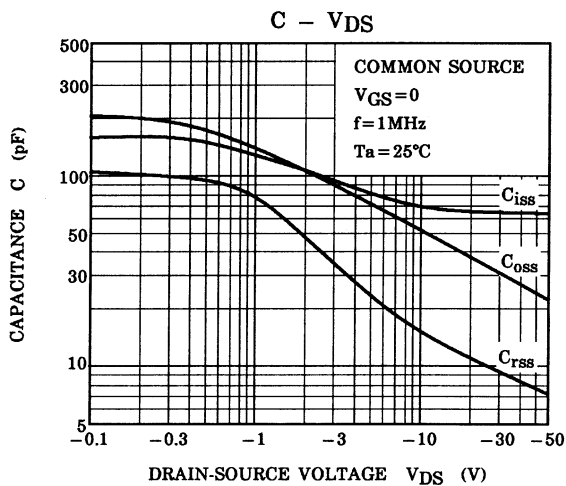
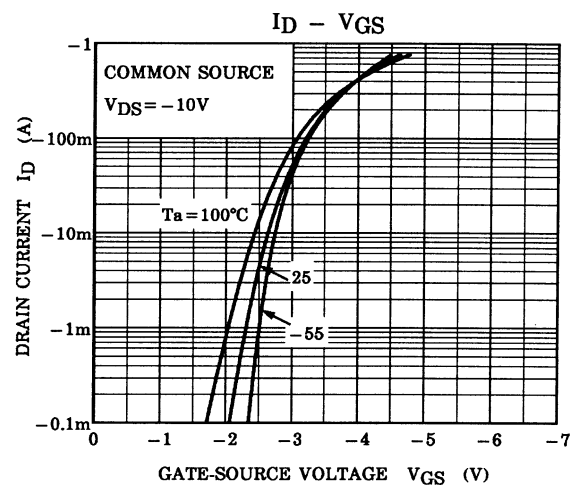
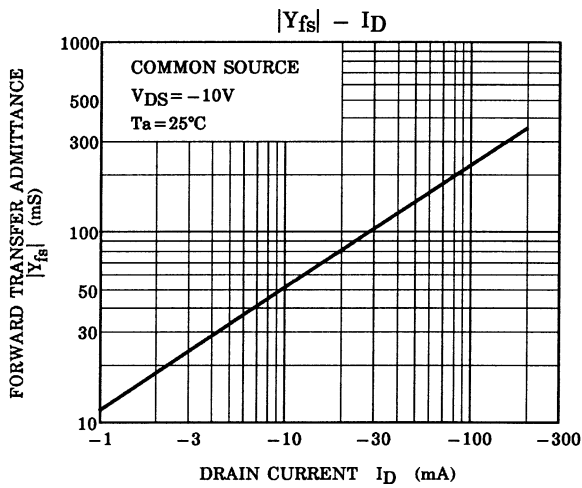
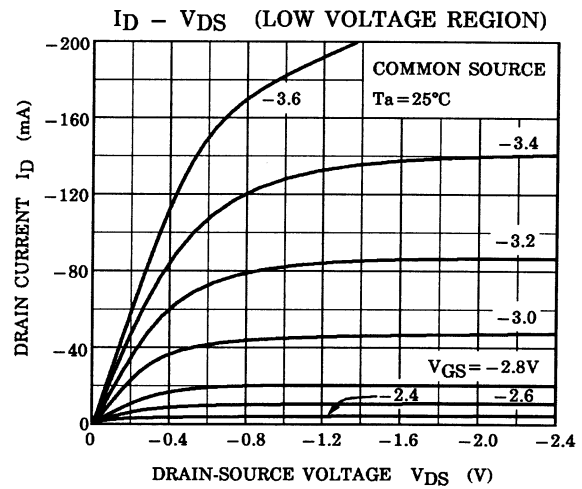
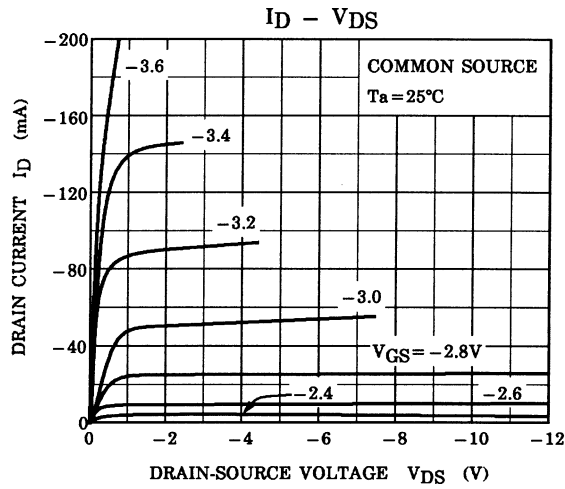


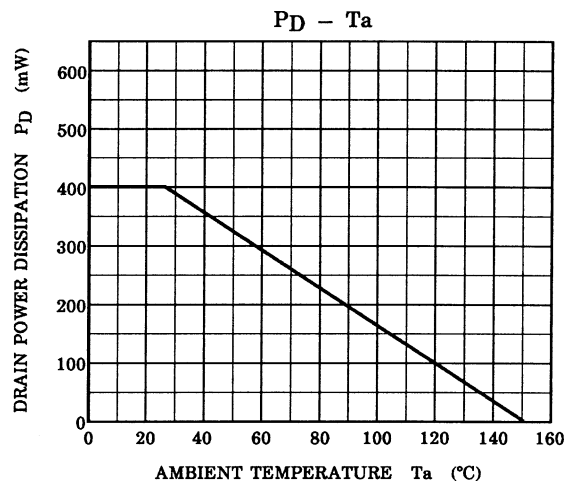
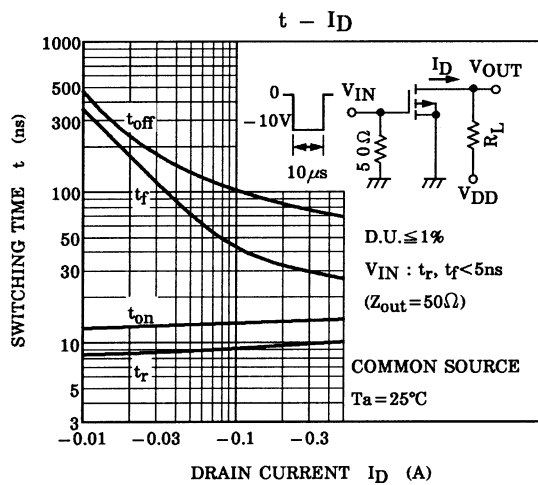
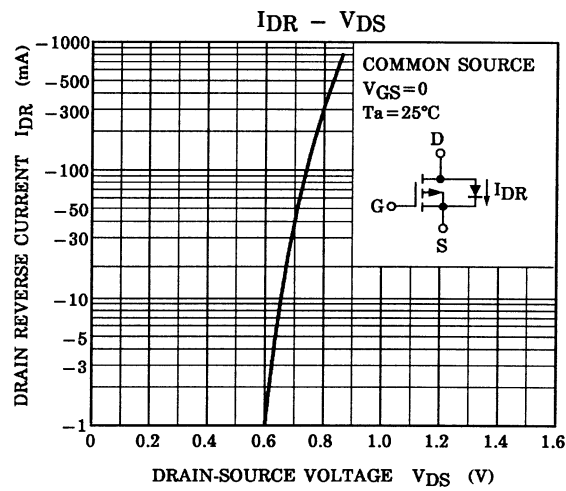
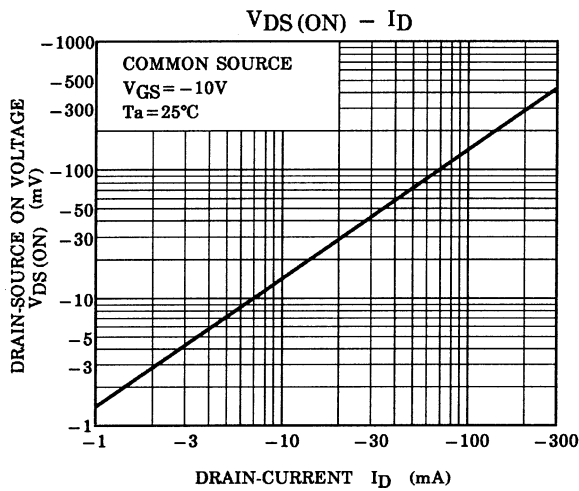
Weight: 0.21 g (typ.)

## Electrical Characteristics (Ta = 25°C)

Characteristics		Symbol	Test Condition	Min	Typ.	Max	Unit
Gate leakage current		$I_{GSS}$	$V_{GS} = \pm 10 \text{ V}, V_{DS} = 0$	—	—	$\pm 100$	nA
Drain cut-off current		$I_{DSS}$	$V_{DS} = -60 \text{ V}, V_{GS} = 0$	—	—	-10	$\mu\text{A}$
Drain-source breakdown voltage		$V_{(BR)DSS}$	$I_D = -1 \text{ mA}, V_{GS} = 0$	-60	—	—	V
Gate threshold voltage		$V_{th}$	$V_{DS} = -10 \text{ V}, I_D = -1 \text{ mA}$	-2	—	-3.5	V
Forward transfer admittance		$ Y_{fs} $	$V_{DS} = -10 \text{ V}, I_D = -50 \text{ mA}$	100	—	—	mS
Drain-source ON resistance		$R_{DS(ON)}$	$I_D = -50 \text{ mA}, V_{GS} = -10 \text{ V}$	—	1.3	2.0	$\Omega$
Drain-source ON voltage		$V_{DS(ON)}$	$I_D = -50 \text{ mA}, V_{GS} = -10 \text{ V}$	—	-65	-100	mV
Input capacitance		$C_{iss}$	$V_{DS} = -10 \text{ V}, V_{GS} = 0, f = 1 \text{ MHz}$	—	73	85	pF
Reverse transfer capacitance		$C_{rss}$	$V_{DS} = -10 \text{ V}, V_{GS} = 0, f = 1 \text{ MHz}$	—	15	22	pF
Output capacitance		$C_{oss}$	$V_{DS} = -10 \text{ V}, V_{GS} = 0, f = 1 \text{ MHz}$	—	48	60	pF
Switching time	Rise time	$t_r$		—	8	—	ns
	Turn-on time	$t_{on}$		—	14	—	
	Fall time	$t_f$		—	35	—	
	Turn-off Time	$t_{off}$		—	100	—	

This transistor is the electrostatic sensitive device. Please handle with caution.





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