

# 2SJ123

## FIELD EFFECT TRANSISTOR SILICON P CHANNEL MOS TYPE

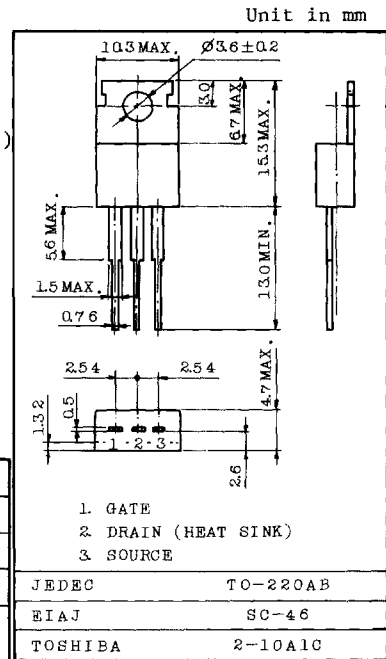
HIGH SPEED SWITCHING APPLICATION.  
DC-DC CONVERTER APPLICATION.

### FEATURES:

- . Low Drain-Source Saturation Voltage :  $V_{DS(ON)}=1.4V(Typ.)$
- . High Forward Transfer Admittance :  $|Y_{fs}|=1.7S(Typ.)$
- . Complementary to 2SK442.

### MAXIMUM RATINGS (Ta=25°C)

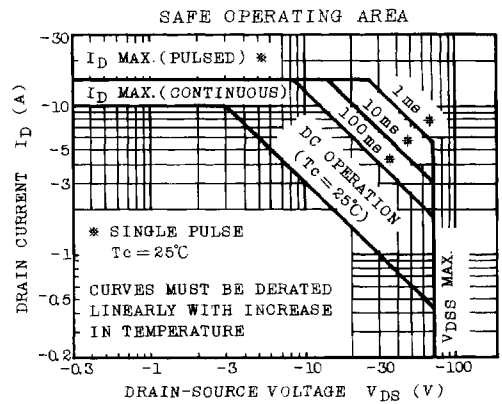
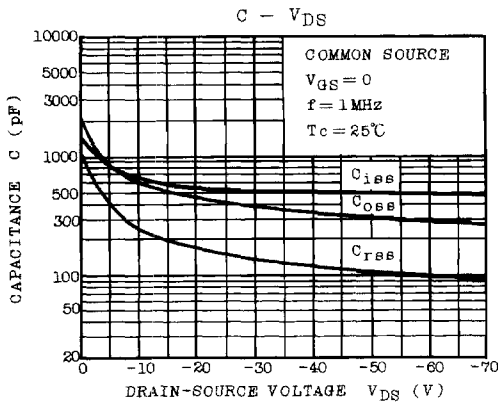
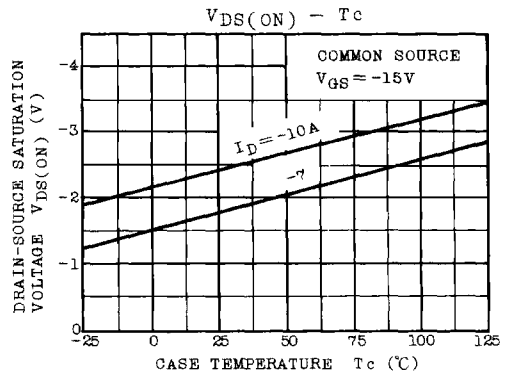
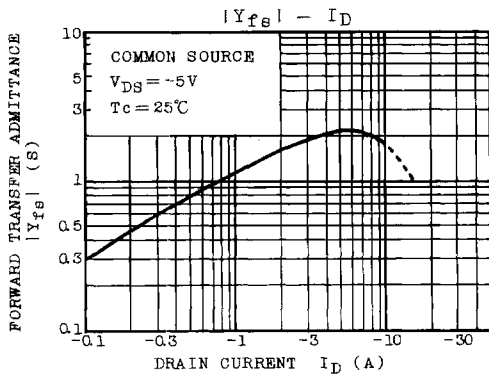
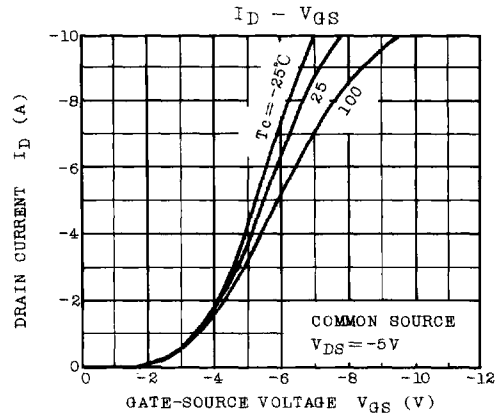
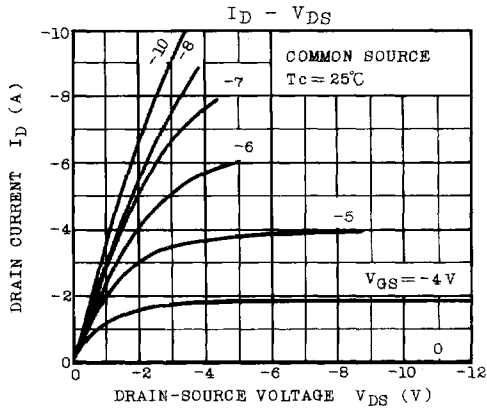
CHARACTERISTIC	SYMBOL	RATING	UNIT
Drain-Source Voltage	$V_{DSS}$	-70	V
Gate-Source Voltage	$V_{GSS}$	$\pm 20$	V
Drain Current	$I_D$	-10	A
Drain Power Dissipation (Tc=25°C)	$P_D$	30	W
Channel Temperature	$T_{ch}$	150	°C
Storage Temperature Range	$T_{stg}$	-55 ~ 150	°C

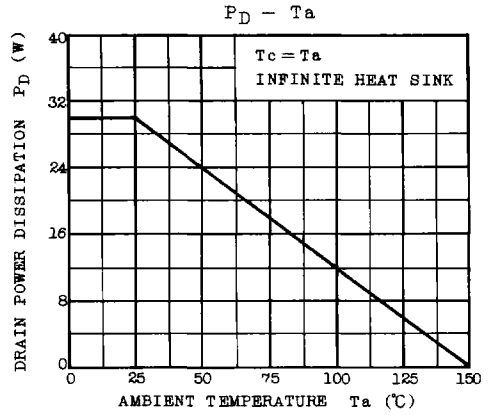
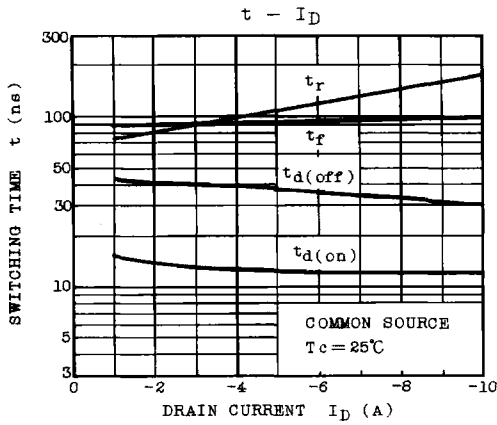


Weight : 1.9g

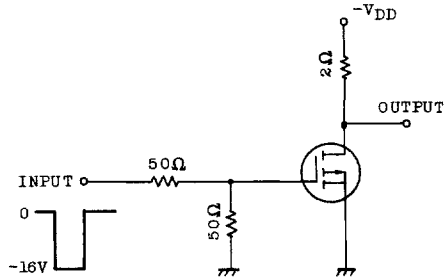
### ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Gate Leakage Current	$I_{GSS}$	$V_{DS}=0, V_{GS}=\pm 20V$	-	-	$\pm 1.0$	$\mu A$
Drain Cut-off Current	$I_{DSS}$	$V_{DS}=-70V, V_{GS}=0$	-	-	-1.0	mA
Drain-Source Breakdown Voltage	$V(BR)_{DSS}$	$I_D=-1mA, V_{GS}=0$	-70	-	-	V
Gate-Source Cut-off Voltage	$V_{GS(OFF)}$	$V_{DS}=-5V, I_D=-1mA$	-1.0	-	-3.0	V
Drain-Source Saturation Voltage	$V_{DS(ON)}$	$I_D=-7A, V_{GS}=-15V$	-	-1.4	-2.8	V
Forward Transfer Admittance	$ Y_{fs} $	$V_{DS}=-5V, I_D=-2A$	1.0	1.7	-	S
Input Capacitance	$C_{iss}$	$V_{DS}=-10V, V_{GS}=0, f=1MHz$	-	650	-	pF
Output Capacitance	$C_{oss}$	$V_{DS}=-10V, V_{GS}=0, f=1MHz$	-	600	-	pF
Reverse Transfer Capacitance	$C_{rs}$	$V_{DS}=-10V, V_{GS}=0, f=1MHz$	-	250	-	pF





SWITCHING TIME TEST CIRCUIT



RESPONSE WAVE FORM

