

TOSHIBA TRANSISTOR SILICON PNP TRIPLE DIFFUSED TYPE

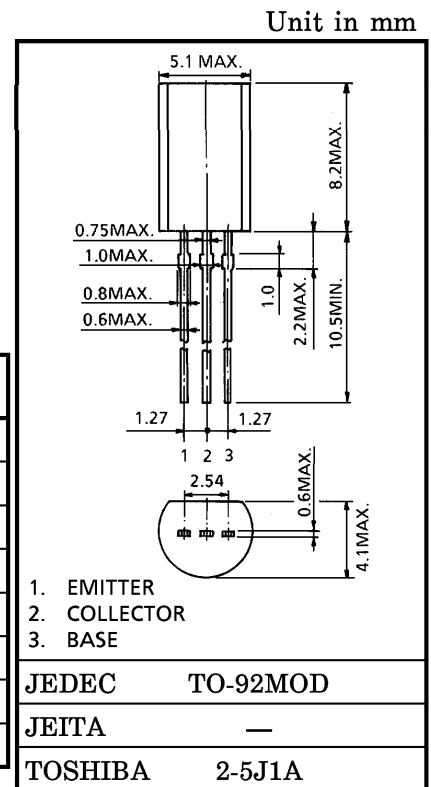
# 2SA949

DRIVER STAGE AUDIO AMPLIFIER APPLICATIONS  
HIGH VOLTAGE SWITCHING APPLICATIONS

- High Breakdown Voltage :  $V_{CE0} = -150V$
- Low Output Capacitance :  $C_{ob} = 5.0pF$  (Max.)
- High Transition Frequency :  $f_T = 120MHz$  (Typ.)

MAXIMUM RATINGS ( $T_a = 25^\circ C$ )

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	$V_{CBO}$	-150	V
Collector-Emitter Voltage	$V_{CEO}$	-150	V
Emitter-Base Voltage	$V_{EBO}$	-5	V
Collector Current	$I_C$	-50	mA
Base Current	$I_B$	5	mA
Collector Power Dissipation	$P_C$	800	mW
Junction Temperature	$T_j$	150	$^\circ C$
Storage Temperature Range	$T_{stg}$	-55~150	$^\circ C$

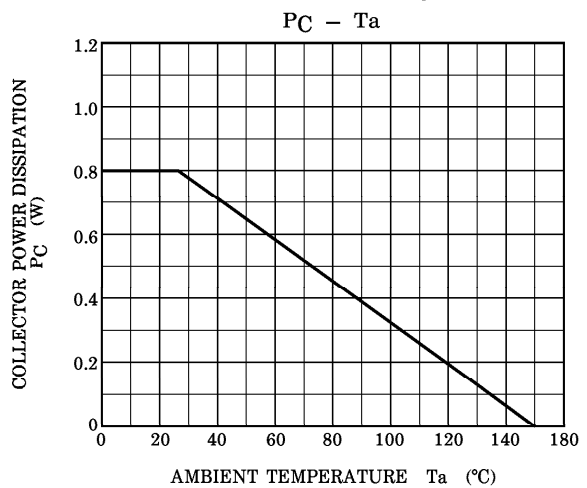
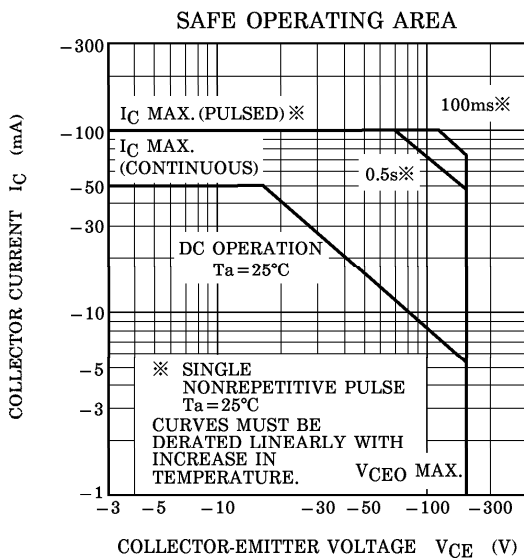
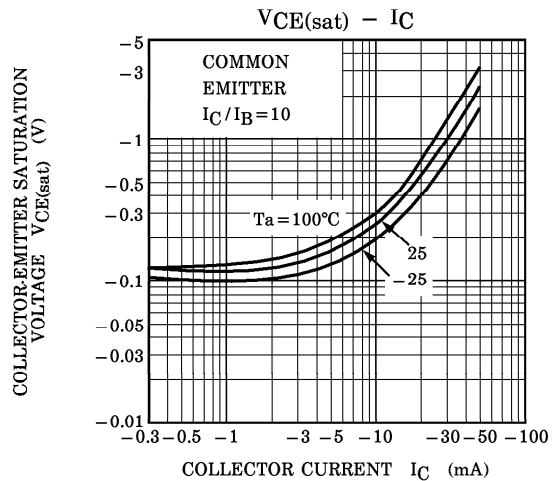
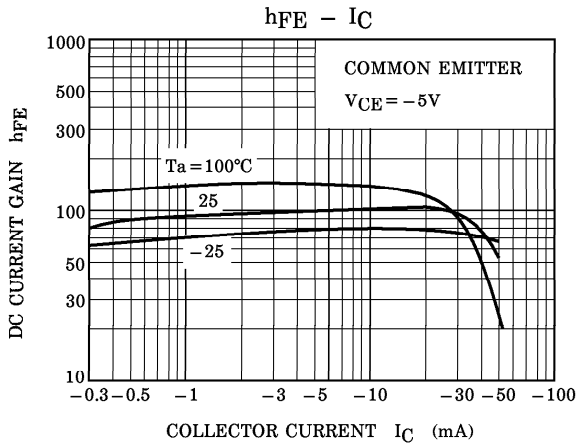
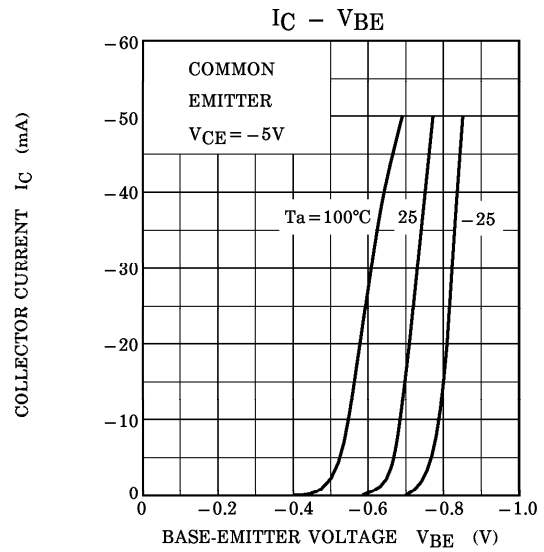
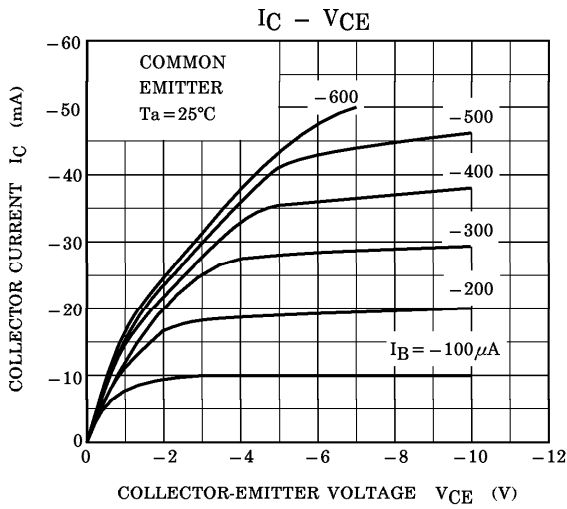


Weight : 0.36g (Typ.)

ELECTRICAL CHARACTERISTICS ( $T_a = 25^\circ C$ )

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{CBO}$	$V_{CB} = -150V, I_E = 0$	—	—	-0.1	$\mu A$
Emitter Cut-off Current	$I_{EBO}$	$V_{EB} = -5V, I_C = 0$	—	—	-0.1	$\mu A$
DC Current Gain	$h_{FE}$ (Note)	$V_{CE} = -5V, I_C = -10mA$	70	—	240	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -10mA, I_B = -1mA$	—	—	-0.8	V
Base-Emitter Voltage	$V_{BE}$	$V_{CE} = -5V, I_C = -30mA$	—	—	-0.9	V
Transition Frequency	$f_T$	$V_{CE} = -30V, I_C = -10mA$	—	120	—	MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB} = -10V, I_E = 0, f = 1MHz$	—	4.0	5.0	pF

(Note) :  $h_{FE}$  Classification O : 70~140, Y : 120~240



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