

TOSHIBA TRANSISTOR SILICON PNP EPITAXIAL TYPE (PCT PROCESS)

2SA1225

POWER AMPLIFIER APPLICATIONS

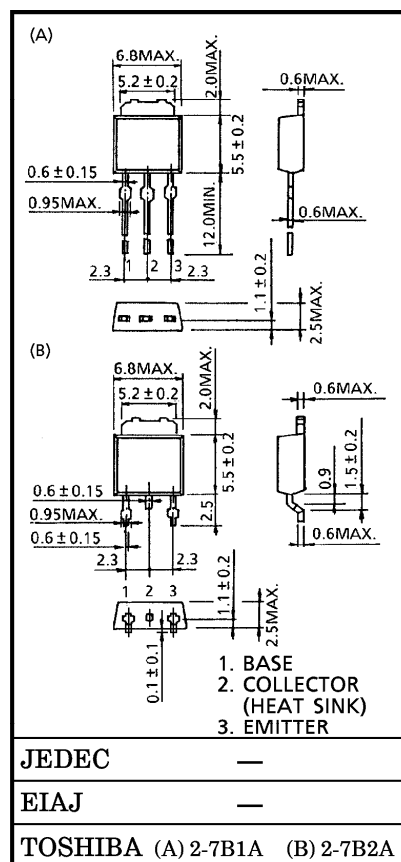
DRIVER STAGE AMPLIFIER APPLICATIONS

Unit in mm

- High Transition Frequency : $f_T = 100$ MHz (Typ.)
- Complementary to 2SC2983

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

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CBO}	-160	V
Collector-Emitter Voltage		V_{CEO}	-160	V
Emitter-Base Voltage		V_{EBO}	-5	V
Collector Current		I_C	-1.5	A
Base Current		I_B	0.3	A
Collector Power Dissipation	$T_a = 25^\circ\text{C}$	P_C	1.0	W
	$T_c = 25^\circ\text{C}$		15	
Junction Temperature		T_j	150	$^\circ\text{C}$
Storage Temperature Range		T_{stg}	-55~150	$^\circ\text{C}$



Weight : 0.36 g

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ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB} = -160\text{ V}, I_E = 0$	—	—	-1.0	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = -5\text{ V}, I_C = 0$	—	—	-1.0	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = -10\text{ mA}, I_B = 0$	-160	—	—	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E = -1\text{ mA}, I_C = 0$	-5	—	—	V
DC Current Gain	h_{FE} (Note)	$V_{CE} = -5\text{ V}, I_C = -100\text{ mA}$	70	—	240	
Collector Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -500\text{ mA}, I_B = -50\text{ mA}$	—	—	-1.5	V
Base-Emitter Voltage	V_{BE}	$V_{CE} = -5\text{ V}, I_C = -500\text{ mA}$	—	—	-1.0	V
Transition Frequency	f_T	$V_{CE} = -10\text{ V}, I_C = -100\text{ mA}$	—	100	—	MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = -10\text{ V}, I_E = 0,$ $f = 1\text{ MHz}$	—	30	—	pF

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

